FACTORS INFLUENCING PATIENTS CONSENTING TO MAJOR SURGERY AT CHIKANKATA MISSION, KAMOTO MISSION, KITWE CENTRAL AND LIVINGSTONE GENERAL HOSPITALS

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LIST OF ACRONYMS

WHO	World Health Organization
USA	Untited States of America
UTH	University Teaching Hospital
IQ	Intelligence Quotient
MoH	Ministry of Health
SPSS	Statistical Package for Social Sciences
UNZA	University Of Zambia

DECLARATION

We, **Fundiwa Backson, Kwenda Robert, Milambo Ethel** and **Siazeelee Muloongo,** do hereby declare that with exception of the assistance of sources acknowledged, this thesis is our original work and has not been presented for a degree or other awards in any other University.

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Signed: Siazeele Signed: Emilambo

Date: 31-05-2013 Date: 31/05/13

CANDIDATES

Approved: _____

Date: 04/06/2013

SUPERVISING LECTURER

STATEMENT

We, **Fundiwa Backson, Kwenda Robert, Milambo Ethel** and **Siazeelee Muloongo** hereby certify that this study is entirely the result of our own independent investigation. The various sources, to which we are indebted, are clearly acknowledged in the text and in the references.

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DEDICATION

We dedicate this study to our families and friends who had to endure this long journey with us, especially families who had to stay without us at home during our study period. The love, support and encouragement rendered to us kept us going in our school journey. May the almighty God bless them all.

ABSTRACT

Informed consent is essential for all surgical procedures whether they be major or minor surgery. It indicates that a patient has permitted the surgical team to conduct an operation on him or her. Few studies have been done on informed consent in clinical practice. This study determined the factors influencing patients consenting to major surgery. The study was conducted at Chikankata Mission, Kamoto Mission, Kitwe Central and Livingstone General Hospital among patients who had undergone major surgery.

The study was a descriptive non-interventional study conducted among patients who were admitted and those coming for reviews. Information was collected from a sample of 200 clients using convenience sampling method and these clients had undergone surgery in the past three months of data collection. Structured pretested interviewer-questionnaires were used. Data were analysed using Statistical Package for Social Scientists (SPSS).

The study revealed low levels of education for the majority of respondents. More female respondents (73%) had adequate knowledge of informed consent than males (27%) and the higher the level of education the more knowledge somebody had on informed consent. It also revealed that majority of the respondents were not given time to ask and answer questions. The study showed that patients who were respected and shown concern by the health workers had adequate knowledge on informed consent than those who were not respected or shown concern by the health workers.

The study demonstrated the need to incorporate information about informedconsent during routine information, education and counselling of patients at different entry points to surgery. By so doing, patients who are scheduled for surgery will not have problems understanding the pre-operation counselling.

Having observed that majority of the respondents in this research were females, there is need to encourage males to improve their involvement in health care utilisation.

Time appeared to be one of the limiting factors to patients' understanding of informed consent. Health workers had little time for one-on-one counselling with patients before surgery. There is need to improve the health worker - patient ratio by employing more health workers.

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND INFORMATION

Surgery is the branch of medicine dealing with manual and operative procedures for correction of deformities and defects, repair of injuries, diagnosis and cure of certain diseases. It stems from a greek word, "Kheirurgos" which means 'working by hand' (Monahan, 2007). It can also be defined as the specialty of medicine that treats diseases and disorders by cutting, removing or changing the body with an operative procedure. Surgery is done by a surgeon, who is a trained physician with special skill at perfoming surgery. It involves the use of instruments to conduct the operation.

The history of surgery is very ancient. According to Monahan (2007), surgery dates back to 450 B.C, when Hippocrates ,the father of surgery used wine or boiled water for wound irrigation. Surgery became a specific medical discipline later in 130 – 200 A.D. During that time, the surgeons used to make the instruments surgically clean through boiling, a technique which was first used by Galen a greek physician. Around the 16th Century, the physicians discovered that much of the mortality following surgery was due to bleeding. So they introduced the use of ligatures to arrest haemorrhage and reduce the number of deaths. In the beginning, surgery was done under cooperation, meaning that no form of anaesthesia was used during the operation.Morton was the first physician to use Ether as an anaesthetic drug in 1846 (Monahan, 2007). Ether was used as an adjunct (support) to surgery and allowed surgeons to perform slower, precise and pain-free operations. Despite these advances, the post-surgery mortality was still high due to post-operative wound infections. One of the factors that could have contributed to high mortality could have been lack of patient involvement in the care.

About the mid 19th Century, surgery emerged as a true medical specialty. Consequently, advances in anaesthesia, surgical environment and technology allowed safer outcomes for patients who underwent surgery. However during operations, consent was rarely obtained from the patients, because surgeons had the mandate to decide for the patient. This was an infringement on human rights which led to the universal agreement to consider obtaining informed consent from all patients before undergoing surgery. According to some documents

found in the Italian, French and Middle-East archives from the 14th Century, medical personnel obtained consent for the purpose of protecting themselves and not the patient. In other words the autonomy of the patient was not considered. The 'hold-harmless document', was used to protect the medical personnel from future responsibility and liability in an event of any adverse occurance(Leclercq et al, 2010). Physicians sworn to uphold the oath of preventing harm and healing the sick failed to respect human rights to justify some sort of ill-concieved experiments or medical practice. The potential for scientific abuse became apparent during the Nuremberg trials of Nazi scientists in the late 1940s, which revealed horifying instances of medical experiments in concentration camps. As a result of these trials the notion of the informed consent was born. The trials led to the formation of Nuremberg code. This code states that,' an individual should have legal capacity to give consent and be able to exercise free power of choice without the intervention of any element of force, fraud, deceit, duress, over reaching or other interior form of constraint or coercion' (Marmor, 2001). In addition individuals should have sufficient knowledge and comprehension of the elements of the subject matter involved. This will enable them to understand and make an enlightened decision. This applies to all interventions done on the patients whether medical or surgical (Ibid). Thus, the initial concept of current informed consent legislation developed in later centuries from case related litigation into a standard practice (Leclercq et al, 2010).

It was decided that the consent should be termed 'informed consent' because patients had to be availed with all the necessary information to enable them make an informed decision, which is still the case to date. The obtained informed consent was considered valid when both the health personnel and the client or relatives appended their signature on the informed consent form. The patient was expected to know the type of surgical operation, the surgeon entrusted to conduct the operation, the nurses who are part of the surgical team and any other person in the team.Patients had to know information about their condition and the treatment options at hand. The nature of the condition and the complexity of the treatment among other factors would determine the amount of information given to each patient. Patients needed to know the possible prognosis of disease if the operation was done and the possible outcome if the operation was declined so that they decide from an informed position. It was the duty of every physician, surgeon or nurse to explain to the patient or the patient's relatives over any other surgical treatment options so that they avoid imposing on the patient. The physician was at liberty to use various information tools

such as written materials, audio tapes, and video tapes to explain to the patient. In the explanation, they were requiredto show the patients pictures of how they would look after the operation, for example pictures of a stump after amputation. This would in return help the patient to be psychologically prepared for the operation and enabled the patient to withstand the traumatic effects of surgery, including coping well with any temporal or permanent disability that might occur. As such, the patient would be able to lead a fulfilling and productive life following surgery.

Surgery is a psychological and physiological experience that can lead to stress (Lewis et al, 2007). Stress is a normal or desirable reaction to surgery which enables the body to adapt and heal peri-operatively. However, excessive stress can compromise recovery. Since there is a possibility of the patient developing excessive stress after undergoing surgical operation, the physician, the nurse and other members of the surgical team were expected to prepare the patients psychologically and physiologically by them giving necessary information like the type of operation and the possible outcome to reduce unnecessary anxiety that would lead to stress (Lewis et al, 2007). Under normal circumstances,patients are gripped with fear prior to surgery, such as fear of previous surgical experience, fear associated with prognosis of disease after surgery, fear of change in life style, fear of change of body image, fear of pain and fear of death. These fears and other emotional issues are capable of affecting the patient's response to surgery. Such factors are seen to perpetrate excessive stress. Some of the harmful effects of stress include rapid shallow breathing, increased muscle tension, release of stress hormones like cortisol, increased heart rate, increased blood pressure and lowered immune system function (Marmor, 2001). To prevent this excessive stress, adequate psychological preparation of the patientwas viewed to be verynecessary before obtaining informed consent from the patient prior to major surgery. Other benefits associated with adequate psychological preparation included less distress and less anxiety, less pain, faster return to health, shorter recovery period and reduced health care demand after empowering the patient to take more responsibility for their recovery during the peri-operative period (Lain, 2012).

Surgical interventionsis either minor or major depending on the extent of the surgical operation. Normally, 'Major surgery' is more extensive than minor surgery and involves so many risks which put patient's lives at more risk during and after surgery. Major surgery is performed under

general anaesthesia, though in some cases it may be done under regional anaesthesia (Monahan, 2007). Some of the effects which are likely tooccur especiallyduring majorsurgery are cardiac arrest and severe allergic reactions (Black and Hawks, 2009). These adverse effects may become more pronounced when coupled with stress. Since there are many risks involved in surgery, it was discovered that both the patient and the surgical team needed to be protected by minimising the risks which largely depended onobtaining informed consent from the patients effectively. All patients needed to be given the opportunity to make an informed decision to either authorise or decline suggestions of surgery as a treatment option. Monahan (2007) writes that the patient gives informed consent which protects their right to self-determination and autonomy regarding surgical intervention. This self-determination and autonomy would ultimately achieve positive outcomes for the patient aftermajor surgery.

Several measures were undertaken to ensure that informed consent was obtained appropriately. In the United States of America (USA), these measures included raising awareness for health personnel, reviewing the informed consent form and motivating Health personnel to change their attitude towards obtaining informed consent (Traveline, 2005). These measures helped the medical personnel in USA to develop a new focus on the importance of the consent in relation to the patient's recovery post-operatively. Reviewing of the informed consent form, raising awareness of informed consent and change of attitude were significant to ensuring that informed consent was obtained effectively. It was important that Medical personnel develop checks to ascertain that the client understood the information explained to him/ her so that he/she was not influenced by other profound factors in making decisions concerning major surgery. The World Health Organisation (WHO) in 2009 recommended that confirmation of informed consent should be repeated before anaesthesia is administered. The concern of WHO was in line with raising awareness that it was possible that some patient would just be instructed to consent without making aninformed decision to do so. A check of the patient just before administration of the anaesthesia was important to know if the patient consented wilfully. The psychological state of the patient before an operation had a big impact on the healing process after surgery, hence the more the patient was aware of the information surrounding his condition, the more he/she was prepared for any outcome. Coping with surgery would have been very difficult if the factors explained above were not taken into consideration.

The autonomy required during obtaining informed consent from the clients was not the responsibility of the surgeon only but it required commitment of the whole surgical team at every level of service delivery, which confirms why checks are important. Failure to allow theseclients' autonomy would lead to difficulties in coping with surgery and eventually raise the number of post-operative complications which would eventually lead to higher mortality rate among clients undergoing surgery. The legal implications associatedwith informed consent on the surgical team and the client was one serious area of concern due to the rising number of court cases involving misinformation and misunderstanding during the process of obtaining informed consent. This was one among many other factors that made it very cardinal to know the reasons that influenced people to consent to surgical operations. Wolfman (2011) suggested that institutions should have been assisted to review the informed consent form. The fundamental application of the informed consent form would be extended to all the stake holders or parties whose work relies on clients' informed consent. This would create an opportunity for addition of necessary information or subtraction of the unnecessary information from the informed consent form. No study was done in Zambia on informed consent and as such no solutions were tried locally. Therefore it was very important for a study to be conducted to ascertain the factors influencing patients to give informed consent to undergo major surgery in order to form a strong basis for obtaining informed consent.

1.2 STATEMENT OF THE PROBLEM

According to a study that was conducted by Traveline et al (2005) in the USAamong patients who gave an informed consent, 44 % did not know the exact nature of the operation to be performed, while 60 to 70 % did not understand orread the information contained in the informed consent form. No study was done in Zambia to assess the knowledge of patients on obtaining informed consent prior tomajor surgical operations. That did not mean that Zambia had been spared. A total of 58 files of patients who underwent major surgery were sampled from post-natal and surgical wards at the University Teaching Hospital (UTH) in Lusaka, Zambia. Out of these, 28 patients consented on their own and 30 had their informed consent forms signed by relatives and significant others (UTH records, 2012). From the 30 whose informed consent was given by others, five were under the authorised legal age (18 years and above)for one to give

informed consent and 19 qualified to give informed consent. This may have indicated that those patients whose informed consent forms were signed by relatives did not understand the procedure and the implications of informed consent before and after major surgery.

The study by Traveline et al (2005) revealed that some patients underwentmajor surgery without fully understanding the surgical operation to be conducted on them and information contained in the informed consent form. Ideally, informed consent is obtained after the surgeon explains the type of operation, expected prognosis, other treatment options, the consequences of consenting or declining surgery and the possible risks involved in the operation.

Consenting for major surgical operation is a very challenging thingto do because of the uncertainity associated with the outcome of major surgery. Hence, understanding the problem leading to major surgery and the promotion of the patient's autonomy is very important. Lack of patient involvement in the preparation for surgery was identified to be very common among medical personnel. Marmor (2001) explains that in practice the physician, attorneys and hospital administrators often used informed consent to protect the physicians and medical facilities fromfinancial liabilities. This had a very bad impact on the outcome of surgery leading to a lot of deaths, poor healing process and at large the follow ups and appointment fulfiments became extremely eratic leading to late surgical intervention. Physicians were called upon to realise that they had an obligation to help patients make autonomous choices because the surgical treatment depends on autonomy of the patients. For this reason, it was important that a study be conducted to ascertain the factors that influence patients to consent to major surgery so that emphasis could be given to allow autonomy of the patient in making an informed decision for surgery.

1.3 FACTORS INFLUENCING PATIENTS CONSENTING TO MAJOR SURGERY

A number of factors influence patients' decision when consenting to major surgery. These include the following:

1.3.1 Service related factors

Inadequate staffing deprives the health workers of ample time to talk to patients and give them detailed information on the treatment options that could be considered, one of which isinvasive surgery. In cases where there is only one person to take many responsibilities

and/or attend to a lot of patients, he/she gets overwhelmed with work such that issues of counselling before obtaining informed consent is not given the necessary attention and seriousness it deserves. The attitude of some health care providers can affect their interpersonal relationships with the clients and that can either make them feel free to ask questions or not.

The presentation of information on the informed consent forms can be complex such that patients may not understand it. Majority of the informed consent forms are written in English and some patients cannot read and understand it, and as such they need interpretation which may not always be acurate. Assumption about patients' comprehension of English can affect the patients' understanding of informed consent. Some health workers may assume that the patientsunderstand the implications of surgery without any form of confirmation from the patient.

1.3.2 Personal related factors

Stress is a normal body reaction to illness even though it may affect an indivdual's judgement and reasoning ability. Sickness can affect a person's thought process and understanding. The patient may choose to agree to surgery especially if they are in pain without fully understanding what is at stake. The person's Intelligence Quotient (IQ) determines their ability to understand surgery and make decisions concerning giving informed consent. Some people may understand information about consenting without difficulties while others may still struggle.

1.3.3Knowledge related factors

A person's understanding of the purpose of giving informed consent can influence their decision to give informed consent for surgical interventions.Patient's understanding may also influencehis/her cooperation which determines the success of surgery. The person's experience of surgery in the past can influence their decision to give informed consent. A bad or good experince with surgery can affect subsequent other surgeries in the patients' life. Health literacy or the prior knowledge about health which the patient has may determine how much time it takes to explain the meaning of surgery. Level of health literacy might also determine the patient's understanding of health issues. Language proficiency can be a factor affecting communication between the health care provider and the patient, like in the case

where certain medical terms may not be easy to translate into a language which the patient understands.

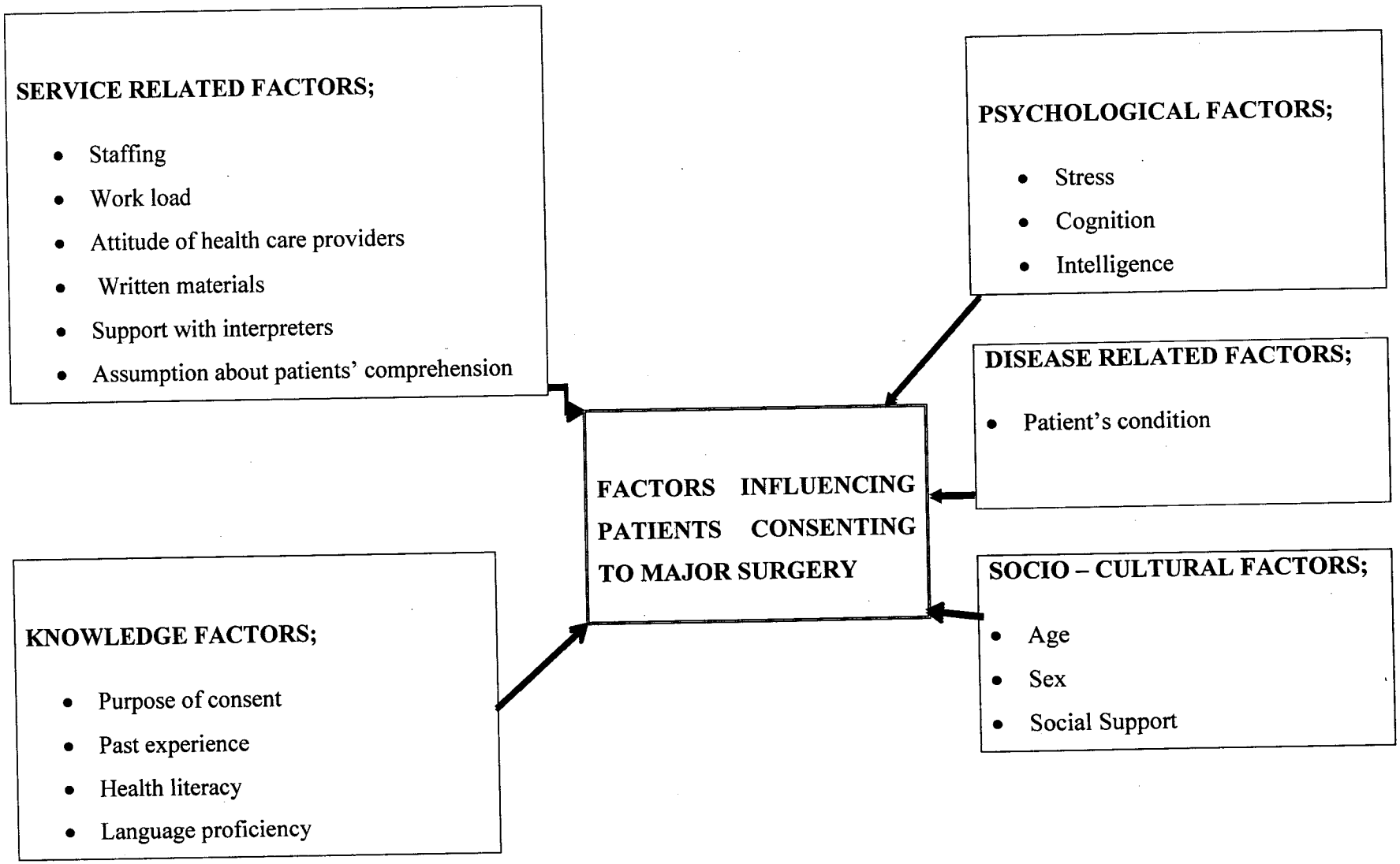
1.3.4 Disease related factors

This refers to the patient's condition at the time of giving consent which can affect their ability to understand the meaning of informed consent prior to major surgery. The disease process may impose excessive stress and incapacitate the patient in relation to the reasoning ability. This may be quite true for emergency surgery.

1.3.5 Socio – cultural factors

The age of a patient is thought to influence their ability to consent to major surgery. By lawpatients below the age of 18 years cannot give informed consent to surgery. The common practice is that women (or females) are taught to be submissive such that they can not make decisions evento do with giving informed consent despite being of age. Women need to wait for thehusband, elder brother or father to come and make a decision. Social Support can be cardinal because it has the ability to influence one's health seeking behaviour. If there is astrong social network, the agreement of the majority can subsequently influence thepatients' decision to consent to major surgery.

1.4 DIAGRAM OF PROBLEM ANALYSIS FOR FACTORS INFLUENCING CONSENT TO MAJOR SURGERY



1.5 CONCEPTUAL FRAMEWORK

A conceptual framework is a written or visual presentation that explains either graphically or in narrative form the main ideas to be studied, the key factors, concepts or variables and presumed relationship among them (Miles and Herberman, 1994).

This study was guided by Peplau's (1952) interpersonal relationship theory. A theory is a set of concepts, definitions, relationships and assumptions that project a systematic view of a phenomenon (Fawcett, 1995). Peplau's theory addresses two cardinal areas which are anxiety and communication. The theory focuses on the individual, the nurse and the interactive process resulting in the nurse-client relationship. Peplau wrote that when a client comes to seek help, the nurse and the client would discuss the nature of the problem. During the discussion, the nurse explains the available services. As the relationship develops, the nurse and the client mutually define the problem, potential solutions and the client benefits from the relationship by accessing information about his/her condition. The nurse helps the client in reducing anxiety related to surgery through information.

According to Peplau, the client is an individual with a need, and nursing is an interpersonal and therapeutic process. The nurse strives to develop a nurse client relationship in which the nurse serves as a resource person, counselor and surrogate. Peplau was of the view that health care givers (for example nurses) need to exercise professional accountability. Her view tallies with the main reason why there is need for obtaining informed consent in all major surgery.

1.5.1 Application of Peplau's model to this study.

Peplau identified six roles of the Nurse in the interaction with the patient. It is important to note that these roles apply even to other members of the health care team or surgical team such as the Surgeon and the Anaesthetist. The roles are as follows:

1.5.1.1 Stranger role; The patient who is scheduled for surgery is received in the same way one meets a stranger in other life situations. The health care provider provides an accepting environment that builds trust.

1.5.1.2 Resource role;The health care provider answers questions, interprets the treatment options and gives information on the type of chosen surgical intervention.

1.5.1.3 Teaching role;The health care provider gives instructions and provides training on the patient's role pre, intra and post- operatively. This role involves analysis and synthesis of the learner's experience with surgery. The nurse or otherwise can teach and ask the patient to do return demonstration, for example, deep breathing exercises.

1.5.1.4 Counseling role; The health care provider helps client to understand the type of surgery and integrate the meaning of life after surgery. He or she provides guidance and encouragement to make changes, for example, if the patient will be required to change career or use prosthesis after undergoing amputation. The counselling helps the client allay anxiety and cooperate with the surgical team which ultimately determines the success or failure of surgery.

1.5.1.5 Surrogate role; The nurse or doctor helps clients gain understanding of the meaning of dependence, interdependence, and independence and acts on client's behalf as an advocate. They help the client feel loved by playing the maternalistic or paternalistic role.

1.5.1.6 Active leadership; The nurse, medical officer or any member of the health care team helps the client assume maximum responsibility for meeting goals of the treatment option in a mutually satisfying way.

Peplau suggested that a patient moves through four phases in developing a healthy relationship with the surgical team. These stages are namely the Orientation phase (assessment), Identification Phase (planning), Exploitation Phase (implementation) and Resolution Phase (evaluation).

This model puts emphasis on professional accountability and personal integrity. If clients are welcomed and incorporated in their care, the outcomes of surgery can be better.

Proper way of obtaining informed consent can be achieved through a good relationship with the patients or clients. The model is helpful in this study because the study's endeavor isto establish factors that influence consenting to surgery.

1.6 JUSTIFICATION

The purpose of this study is to find out the factors which influence patients to consent for surgical operations. The anxiety and stress which patients experience prior to surgery can be due to lack of knowledge about the possible outcomes and implications of surgery. In view of these considerations, there is need to obtain informed consent from the patient undergoing surgery to protect the interest of both the patient and the surgical team from legal implications in case of any unforeseen events.

In many instances patients consent for surgery with little understanding of the actual experience involved in the surgical operation. Some of the reasons are that some patients fear to ask from the surgical staff and others fear the pain and discomfort due to the disease process which prompts them to consent so that they get rid of the discomfort. Some patients who are below 18 years have their informed consent forms signed by relatives or parents and the majorities who are married wait for their spouses to consent on their behalf.

The results of this study review the current understanding of the patients concerning informed consent for surgery. It is hoped that this can in turn create the basis upon which recommendations will be made and forwarded to policy makers at the Ministry of Health (MoH). This helps to improve the quality of care for the patients who are exposed to surgical treatment and promotes copying with surgery.

1.7 RESEARCH OBJECTIVES

1.7.1 General objective

To determine factors that influence patients' decision to consent to major surgery.

1.7.2 Specific objectives

i. To assess patients` level of knowledge on the meaning and the implication of informed consent in surgery.

ii. To determinewhether there is effective communication between patients and staff during the process of obtaining consent for major elective surgery.

iii. To explore the influence of health workers' attitude on patients consenting to major elective surgery.

1.8 HYPOTHESES

i. The level of knowledge on informed consent is influential on patients consenting for major surgery.

ii. There is a relationship between patients' level of education and understanding of the informed consent.

iii. The attitude of health workers plays a major role on the amount of knowledge that patients possess on informed consent.

1.9CONCEPTUAL DEFINITION OF TERMS

i. Informed consent

Informed consent is an active shared decision making process between the provider (health worker) and the recipient of care –the patient or client (Lewis et al, 2007).

ii. Stress

Defined as the body`s reaction to a change that requires a physical, mental and emotional adjustment or response (Morrow, 2011).

iii. Major surgery

Major surgery is considered any surgery that is extremely open and intrusive or invasive in which a more extensive resection is performed. For example abody cavity is entered, organs are removed or normal anatomy is altered (Shea, 2010).

iv. **Health literacy**

The degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions (Glassman, 2010).

v. **Attitude of health care providers**

A predisposition or tendency of health care providers to respond positively or negatively towards an idea, object, person or situation. Attitude influences an individual's choice of action and responses to challenges, incentives and rewards (Glassman, 2010).

1. 10 OPERATIONAL DEFINITIONS

i. **Informed consent**

Informed consent is a legal document obtained from the patient or any other authorized person that permits the surgical team to conduct an invasive or major surgical operation.

ii. **Knowledge**

Knowledge is defined as the level of understanding which a person has regarding making an informed decision pertaining to major surgery

iii. **Communication skills**

The ability and act/ process of exchanging information between the health care providers (originators) and the clients/ guardian (receivers).

iv. **Staffing**

The number of people working in a place, ward or department.

v. **Stress**

Strain felt by somebody which can be mental, emotional or physical caused by anxiety.

vi. **Major surgery**

In this study major surgery refers to an invasive surgical procedure performed on the patient under the use of either regional or general anaesthesia and poses a high risk on the patient`s life before, during and after the operation.

vii. **Work overload**

The amount of work in relation to the time in which that work is supposed to be done.

viii. **Surgical experience**

Surgical experience in this study refers to the process of having undergone surgery or surgical treatment of any kind previously.

ix. **Health literacy**

The extent of knowledge and understanding on matters relating to a person`s wellbeing.

x. **Attitude of health care providers**

Attitude of health care providers in this study refers to general feeling or perception or relationship between the people who are rendering a health service and the patients themselves or clients.

xi. **Patient`s condition**

The degree or extent of sickness and general health of the patient or an individual.

Table 1:VARIABLES, INDICATORS AND CUT OFF POINTS

VARIABLE	INDICATOR	CUT OFF POINTS	QUESTI NUMBE
Independent Variable. Knowledge of informed consent.	9-12 correct scores out of 12 knowledge questions.	Adequate knowledge	8 - 19
	5 – 8 correct scores out of 12 knowledge questions.	Moderate knowledge	
	1 - 4 correct scores out of 12 knowledge questions.	Inadequate knowledge	
Dependent Variable. Attitude of health workers.	3-4 correct scores out of 4 marks	Positive attitude	20 - 23
	1-2 correct scores out of 4 marks	Negative attitude	
Dependent Variable. Communication skills.	7-12 correct scores out of 12 marks	Good	24 - 35
	1-6 correct scores out of 12 marks	Poor	

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is a broad, comprehensive, in-depth, systematic and critical review of scholarly publications, unpublished print materials, audio-visual materials and personal communication (Basavanthappa, 2006). The typical purposes for analyzing existing literature is to identify what is known and the unknown about a topic so that a comprehensive picture of the state of information or knowledge can be obtained to avoid unintentional duplication and to describe methods of enquiry used in earlier work including their successes and short comings (Basavanthappa, 2006).

This study relates to factors that influence consenting to major surgery. The literature review will focus on published information, published research papers, books and unpublished research proposals, government reports and records, articles, journals, and computer data bases that have been conducted on this subject. The literature review will look at factors that influence consenting to major surgery. These factors will either promote healing post operatively or delay recovery which may be due to psychological trauma.

In this study the literature review has been organised according to variables and discussed according to researches done pertaining to each variable.

2.2 OVERVIEW OF FACTORS INFLUENCING CONSENTING TO MAJOR SURGERY

The authority which patients give for surgery to be done on them is known as consent. This consent is referred to as 'informed consent' because patients need to have as much information as possible to enable them make a decision. The information which is important for patients includes the type of surgical operation, the surgeon entrusted to conduct the operation, the nurses who are part of the surgical team and other members of the surgical team. The patients should understand the nature of their condition and available treatment options. They should know the possible outcomes and the complications of the operation before making an informed decision. It is the duty of every physician, surgeon or nurse to explain to the patient or their relatives over all treatment options. They do not have to impose operations on the patient. The delivery of the

information equally matters because it determines whether the patient understands or not. Health care providers need to know how to communicate effectively with patients.

A lot of research has been done on the subject of informed consent. This study will focus on the factors that influence reception of information which eventually influences the patient's understanding of informed consent. The research will look at these factors under the following variables; Knowledge, Communication skills and Attitude of health workers.

2.3 KNOWLEDGE

Knowledge is one of the most important factors influencing consent to major surgery. It can encourage patients to consent or not to consent to surgery. In this study, knowledge has been defined as the level of understanding which a person has regarding making an informed decision pertaining to major surgery. It constitutes all facts that someone knows about a particular subject (Rundell, 2007).

A number of studies have been done around the world to demonstrate how knowledge influences consent to major surgery. In a court case which was reported by Suzukawa (2011) from California Court of Appeals, a four year old minor underwent repair of bilateral inguinal hernia. This operation resulted in multiple neurological complications such that the minor could not swallow, walk or talk and exhibited intellectual behaviour of a typical four – twelve months old child. He also developed a small head and had low muscle tone. The child's father had earlier consented to surgery but upon seeing the complications, he sued the surgeon who performed the operation claiming that the surgeon failed to obtain written informed consent to perform the hernioraphy. He was claiming that the surgeon got the consent through a phone call without the parent's full understanding of the complications. After the court ruling, the surgeon and the health team were found guilty for failing to produce evidence of the written informed consent. The surgical team also failed to produce evidence that they explained fully the consequences and possible complications expected to the minor's parent. If the father to the minor was explained to about the condition of the child, the treatment and the expected complications, it was going to be easy for him to understand the outcome of the surgery, hence legal implications would have been avoided.

Another study was conducted in Pakistan to evaluate the practice of informed consent in patients undergoing surgery. A total of 106 patients were randomly selected from a University Teaching Hospital in Jamshoro. All the participants were above 18 years. The participants were asked if informed consent was obtained from them before surgery or not. They were also asked whether they were given information about the diagnosis and whether the surgical procedure was planned and the risks associated with it explained. The study revealed that in about 8.5% cases, no consent was taken and only 38% of the surveyed patients agreed that they actually understood the information disclosed to them about the type of surgery. About 66% patients were informed about the type of anaesthesia proposed but none was given any hint about possible complications of anaesthesia. In this study Faisal, Jan and Muhammad (2010) concluded that the quality of existing informed consent process at Jamshoro University Teaching Hospital was less than ideal. There is a great need to educate the doctors and healthcare providers regarding the importance of patient's autonomy and their right to information about the medical condition and the proposed surgical procedures to ensure that they participate in decision making regarding their treatment. According to this study, it is clear that in most instances information is not given in a good and suitable manner to allow patients the autonomy to make informed decisions. This has been detected openly during anaesthesia as well as surgery where patients or clients just sign for things which they do not understand. Such limited knowledge tempers with the patient's right and freedom to informed consent.

A related study was done in Johannesburg, South Africa by Kalala (2011) on patients' perception and understanding of informed consent for surgical procedures. The study involved patients who were booked for elective surgery. The researcher analysed different aspects of information including social and demographic profile, formal education and previous medical and surgical history, perception of informed consent, process of informed consent, knowledge of the procedures, risks and alternatives. The study demonstrated that only 4.1% had tertiary education, 32% did not reach secondary school, of which 11.2% had no formal education at all. Concerning their prior medical/surgical background, 26.5% were on chronic medical treatment and 48% had previous surgery. Only 27% perceived the signing of consent as proof that they understood the procedure. In this case 73% or the bigger representation of this group did not understand the

procedure before giving informed consent. This is highlighting that knowledge of the procedure is an important factor to influence consenting to surgery.

There is no study which was done in Zambia related directly to informed consent in major surgery. However, much has been done in consenting to male circumcision. For instance, a study was done by Friedland et al (2011) involving adults and adolescent clients for male circumcision. The clients were sampled from various male circumcision clinics country wide,from these clients, majority of adults who were interviewed said they had chosen to undergo male circumcision voluntarily without pressure or coercion though some did not know the meaning of signing on the consent form. Some clients thought that signing the consent form was meant to free the service providers from all liability. Other clients did not remember signing a consent form to authorize surgery to proceed. This study demonstrates that despite people consenting for surgery they do not have adequate knowledge on the meaning of giving informed consent.

2.4 COMMUNICATION SKILLS

Where ever there is exchange of information, the way of sharing that information matters. It determines the degree to which the receiver will decode the message being communicated. If the originator of the information is not clear, the perception of what they are delivering will be full of distortion on the receiving end. In this study, communication has been defined as the ability and act/process of exchanging information between the health care provider (originator) and the client/guardian (receiver). This communication prior to surgery can be enhanced and reinforced through various ways such as use of pictures, models, videos and so forth.

A study was conducted by Goldworth (2009) in the U.S.A about communication with regard to informed consent. He established that even if it is now 40 years since the introduction of informed consent as a legal requirement for Medical-Surgical treatment, many clients and their relatives have different views on its need and effectiveness. Some feel that they can just trust doctors to behave in the best interests of the patients. They argue that an ordinary individual has limited capacity to understand the relevant information concerning surgery (Ibid). In some instances clients can attain a good level of understanding but are distracted by elements such as the manner in which information disclosure is made. Some clients are distracted by limitations like language. This study shows that health care givers need some special communication skills

in order for the clients to get what they are communicating. Only then will clients be able to appreciate the meaning and effectiveness of informed consent. If health care providers develop good communication skills, everyone will have similar views of informed consent and this will address the variations in how people view consent.

In a different study by Faisal, Jan, and Muhammad (2010), about 91.5% consents were obtained by junior doctors, nurses or the paramedics such as registrars, postgraduates, and interns. In all the cases used for the study, surgeons did not obtain consent from their clients. They sent junior doctors to obtain consent from the patients. Only 19.8% consents were taken in the patient's mother tongue and 38% agreed to the fact that they fully understood the information relayed to them in their mother tongue. Some consent was taken on handwritten documents scribbled by the person taking the consent, implying that the institution did not have a standard format for obtaining informed consent. Some institutions do not have standard formats for obtaining consent, meaning that the one getting consent will only write what they want and not the actual standard thing to be done. It is also rare that consent forms are translated into a local language which calls for understanding of English for one to comprehend it.

Ogundiran and Adebamowo (2010) conducted a study in Nigeria to survey Surgeons' opinions and practice of informed consent. In this study, most surgeons fell short in providing necessary information to patients concerning their illnesses and when obtaining consents for surgical interventions. Despite having basic knowledge of principles and understanding of their moral obligations, most surgeons were lacking in the practice of obtaining proper informed consent. They acknowledged poor communication as being mostly responsible for patients' refusal of necessary surgical procedures and further suggested that a course on Bioethics would be helpful to improve the process of obtaining consent (Ibid). Surgeons need to provide sufficient and relevant information during the surgeon-patient interaction. This improves patients' informed decisions based on facts and not rumours.

Based on these studies, the way information is presented to the patients greatly influences what they can remember. It may also affect the choices that the patient makes and how they respond to surgery. The member of the health care team who delivers the information also matters because each one will deliver or communicate what they understand and how they understand it. It is

very important for health care providers to develop good communication skills and improve patients' understanding of information and their involvement in clinical discussions and decision making.

Locally, no research has been done to show the effect of communication on informed consent in major surgery. In a study by Friedland (2011), most participants felt that the language used in consent forms was a barrier to patients' understanding of informed consent. They argued that the low levels of literacy amongst most communities in Zambia also influence understanding of the information delivered. This implies that language affects the way patients get information from the health care providers. It has a negative effect on the way consent is obtained. A language known to the originator and the receiver would help in enhancing receiver's comprehension of the information being delivered, in this case informed consent in major surgery.

2.5. ATTITUDE OF HEALTH WORKERS

Attitude is a feeling that a person has about something which influences his behaviour (Wellington, 2008). It is an enduring organisation of what someone believes or feels which eventually affects how they behave towards significant objects, groups, events, symbols and individuals. In this study, attitude refers to how health care providers and members of the surgical team receive and treat clients prior to undergoing surgical operation. Mayor et al (2006) defined attitude as the opinions or feelings that a person has towards something, portrayed in their behaviour. Clients also have a way they view health workers and that has some effect on their interaction with the nurses, doctors and other paramedics who make up the surgical team.

The general handling of patients affects how patients accept the services offered to them. A negative attitude by the staff towards patients such as shouting at them, talking to them without respect or looking down on them discourages them from utilizing any health services. Sometimes clients are able to judge whether the health care provider is interested in them or not just from the time spent explaining the procedure, types of surgery, and possible complications of the planned surgery. According to the "Theory of interpersonal relations," by Peplau (1909 – 1999), the interpersonal relationship between the nurse and the client or patient determines the outcome of the patient's treatment. According to Peplau, the client is an individual with a need, and nursing

is an interpersonal and therapeutic process. The health care team members strive to develop a therapeutic relationship with the client in whom the health care provider serves as a resource person, counsellor and surrogate. Many factors affect attitude and these include one's cultural beliefs and practices.

In the study involving surgeons from south –west Nigeria done by Ogundiran and Adebamowo (2010), they found that despite having basic knowledge of principles and understanding of their moral obligations, most surgeons lack the practice of obtaining proper informed consent. This scenario borders on the surgeons' attitude towards patients and respect for their autonomy regarding being involved in decision making. Such an attitude to a great extent affects the health care- client relationship.

Locally, many studies have been done in relation to effect of attitude in a number of expert areas. No study has been done specific to informed consent in relation to major surgery. From experience, many clients have complained concerning the attitude of health workers. Some say that nurses are unapproachable and rude. As a result their clientele fail to approach them for any consultation. Nurses attribute their bad attitude to low staffing levels and the resultant work overload. The quality of care is equally compromised because there can be no quality without communication between the recipient and the giver of the service. Therefore attitude is one of the major determinants to the understanding of the information being delivered at every level which has a bearing in decision making. Attitude has the same effect to both parties, the client and the medical staff.

2.6 RELATIONSHIP AMONG VARIABLES

This section looks at the relationship between knowledge of informed consent, communication skills and attitude in relation to obtaining informed consent in major surgery. It is important to have knowledge on the subject matter and to know how to communicate the required information effectively. It is imperative to have an attitude that promotes good interpersonal relationship between the client and the health care provider. Having good attitude helps to communicate the needed knowledge to the intended group or audience effectively.

A study was done in Nigeria on surgeons' opinions and practice on informed consent by Ogundiran and Adebamowo (2010). Fundamental to this study was the provision of relevant information for the patient to make an informed choice about surgical intervention. The study revealed that most Surgeons in Nigeria seemed to have a good knowledge of informed consent requirements and process but fell short in practice. The study concluded that there is need to improve the surgeon – patient relationship to provide interacting environment for fruitful patient communication and involvement. This study shows that there is a relationship among knowledge, attitude and communication skills. Surgeons had the knowledge but they need communication skills for them to deliver that knowledge effectively. The communication skills application would also depend on the attitude of surgeons towards their duty to deliver the right information to their clients. There is a degree of synergism among the three variables. They all influence each other in some way and eventually affect the patient's understanding of informed consent.

2.7. CONCLUSION

From the reviewed literature, it is clear that patients are not given enough information to give informed consent for major surgery. The literature shows that the inadequacy of information can be attributed to the manner in which information is delivered, the language barrier, relationship between the surgical staff and the patient and age among other factors. Literature also shows that there is scanty understanding of the purpose, effectiveness and the usefulness of giving informed consent for major surgery. This is somehow related to how the information is delivered to the client.

There is no literature relating to the practice of informed consent in general surgery involving major surgical operations in Zambia. The only literature available related to surgery is inclined to informed consent in male circumcision. From this literature, it is eminent that the problems of informed consent are everywhere, they are a global concern.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. RESEACH DESIGN

A research design is the overall plan for obtaining answers for questions being studied and handling some of the difficulties encountered during the research process (Polit and Becker, 2008). It is a blue print for conducting the study with maximum control over factors which could interfere with the validity of the findings. The research design guides the researcher in planning and implementing the study in a way most likely to achieve the desired goals. The maximum control of factors increases the probability of accurate reflections of reality (Burns and Groove, 2009). The design of this study is the end result of decisions which were made by researchers concerning how they would implement or conduct the research. In other words the research design guides in planning for implementing/conducting of the study.

The study was a descriptive non-interventional study. A descriptive study is a scientific method which involves observation and description of the behaviour of subjects without altering it in any way (Burns and Groove, 2009). According to Basavanthappa (2007), a descriptive study is defined as a study carried out for the purpose of providing an accurate depiction of a group of subjects with specific characteristics. The study was done in a natural setting, implying that it would be done in the setting as it was found by the researchers, without any manipulation. The researchers did not introduce any form of interventions or treatment to the study subjects. The study did not have any control group. Descriptive studies require the precise measurement of phenomena as they exist within a single group, which are the post-operative patients who had undergone major surgery. The descriptive study design assisted the investigators to observe, describe and document factors influencing patients to give informed consent for major surgery as they occurred.

A non-interventional descriptive study design was chosen because no interventions were required during the study. The researchers collected more information from the clients on knowledge of informed consent, communication and attitude of health workers towards consenting for major surgery.

The purpose of the study was to obtain new information on factors influencing consenting to major surgery and provided a description of the relationships among variables which include knowledge on informed consent, communication skills and attitude of health care providers.

3.2. RESEARCH SETTING

The research setting is a physical location or condition in which data collection takes place in a study (Polit and Beck, 2008).The study was carried out in Kitwe District in Copperbelt Province at Kitwe Central Hospital, Chikankata District in Southern Province at Chikankata Mission Hospital, Mambwe District in Eastern Province at Kamoto Mission Hospital and Livingstone District in Southern Province at Livingstone General Hospital.

3.2.1 Kitwe Central Hospital

Kitwe Central Hospital found in the Copperbelt Province was one of the study sites. The city of Kitwe has a total population of 522, 092 which is 26.7 % of the total population of the copperbelt province. The city shares borders with Ndola city, Chingola town, Kalulushi town, Luanshya town and Mufulira town. The hospital is a second level referal where they receive many referals from the different parts of the copperbelt and it provides for internship to newly graduated medical officers who still have sharp skills of following the procedure in doing medical/ surgical activities. The implication is that in such an institution one would expect to find a number of things being done according to the standard procedures.

3.2.2 Livingstone General Hospital

Livingstone General Hospital is a government owned institution situated in the country's tourist capital. The Hospital is the biggest in Southern Province and thus it is a referral hospital for the province. It shares borders with Mwandi Mission Hospital in the western side, Zimba Mission Hospital in the north and it is in the border town between Zambia and Zimbabwe. Livingstone General Hospital has a bed capacity of 325 Beds. It has a catchment population of 1,750,568 people. It has a training school for nurses and it provides internship to newly graduated medical officers and medical licentiates. These programmes make it very suitable for this study because all the categories mentioned above promote excellence in

service as well as quality in the work output. It is expected that proper procedures would be administered to obtain consent.

3.2.3 Kamoto Mission Hospital

Kamoto Mission Hospital is an institution for Reformed Church in Zambia (RCZ) which is also the only hospital in Mambwe district of Eastern province. It is a first level hospital with the bed capacity of 60 and it is used as a district hospital servicing nine rural health centers and three health posts. The catchment area covers a population of 70,200 people. All the health centers refer the patients to Kamoto Mission hospital for surgery. It is the only hospital in the whole district and being a mission institution there is a great advocacy for excellence in following the standard procedures and quality of work including the processes of consenting for surgery. It is convenient for this study.

3.2.4 Chikankata Mission Hospital

Chikankata Mission hospital is situated 61 km away from Mazabuka town. It is the biggest hospital in Chikankata district. The catchment area population is 92,210. It is surrounded by 3 rural health centres. The bed capacity is 200. It has a Nursing School, Biomedical School, AIDS management training centre and other various community projects. It is a first level institution. Being a mission institution and with so many training institutions adds an advantage for this study to be conducted there. The mission institutions are very good and they aim on quality in anything that is done. In dealing with the surgical patients the mission institutions are very good in providing spiritual and psychological care and this helps the maintenance of high standards. It is expected that even the process of obtaining consent is followed very well by the staff and students.

The study was conducted at the named health institutions because they all conduct major surgical operations. Most of them serve big communities and act as referral hospitals for other health centres around their catchment population. The researchers chose to conduct the study in these hospitals because every institution which conducts major surgery does get informed consent.

3.3 STUDY POPULATION

Study population refers to a total category of persons or objects that meet the criteria for study established by the researcher (Basavanthappa, 2007).The study population comprised of clients who underwent major surgery in the last three months at the time of data collection. It covered people aged 18 years and above, both male and female whounderwent majorelective surgery. The study included post-operative patients who went for review and the in-patients admitted to surgical wards. This study population was chosen because all respondents underwent major surgery and there was enough time for them to be given enough information before undergoing surgery.

3.3.1 Target Population

The target populations in this study werepatients who underwent major elective surgery in the past three months of data collection. The respondents were aged 18 years and above.

3.3.2 Accessible Population

The accessible population in this study were200 post operative patients (50 from each Hospital) aged 18 years and above. All respondents had undergone elective surgery. These are considered legally able to give informed consent before surgery. They were considered to be mature and had the ability to make decisions on their own unless hindered by the disease severity. Thispopulation comprised of patients admitted to surgical wards and those who went for review.

3.4 SAMPLE SELECTION

A sample is a subset of the population that is selected for a study (Burns and Groove, 2009). Sampling is the process of selecting representative units of a population fora study in research. Sample selection is the process of selecting a subset of a population in order to obtain information regarding a phenomenon in a way that represents the entire population (Basavanthappa, 2007).

In this study convenience or accidental sampling which is a non-probability sampling method was used. This is the use of the readily available or accessible persons or objects as subjects in a

study (Lobiondo and Wood, 2009). This was appropriate because the study was conducted in a short period of time and the study population was restricted to those patients who underwent major surgery only, either still on the wards or went for review as outpatients. The sampling technique also incorporated the purposive or judgement sampling technique because the researchers looked specifically for post-operative patients who underwent major surgery and not any other type of surgery. Despite using respondents who were available at the time of the study, the researchers excluded any surgery that could not qualify to be termed as major surgery.

3.5 SAMPLE SIZE

The Sample size is a small part of a population selected in such a way that the individuals in the sample represent as near as possible the characteristics of the population (Polit and Hungler, 2007). The criteria for selecting the sample size took into account the availability of resources in terms of time, manpower, transport and money for other expenses such as stationery. The sample size was 200 respondents in total who were shared among four (4) researchers.

3.6 DATA COLLECTION TOOL

A data collection tool is an instrument or equipment used for collecting data which could either be a questionnaire, an interview schedule, a projective device or some other type of utensil for eliciting information (Polit and Hungler, 2007).

A semi-structured interview schedule (Questionnaire) was used to collect data. Section A contained questions on demographic data; Section B, questions on knowledge of informed consent, Section C, questions on the attitude of health workers and section D, questions on communication skills applied by health workers towards patients scheduled for major elective surgery. The questionnaire had both open and closed ended questions and the same tool was used to interview all respondents.

3.7VALIDITY

Validity refers to whether a measurement instrument accurately measures what it is supposed to measure (Polit and Beck, 2008). When an instrument is valid it truly reflects the concept it is supposed to measure. Validity was assessed after the pilot study. The instrument (semi

structured interview schedule / questionnaire) was assessed to determine if it measured what it intended to measure.

3.7.1 Internal Validity.

Internal validity occurs when researchers control all extraneous variables and the only variable influencing the results of the study is the one being manipulated by the researchers. This means that the variable the researchers intend to study is indeed the one affecting the results and not some other unwanted variables. Internal validity seeks to establish whether the effect on the dependent variable observed was actually due to the action of the independent variable.

In this study the researchers had put in measures to uphold internal validity. During the study, there was uniformity and conformity in the way questions were asked. Questions were written in simple and clear language. To take care of maturation, the questionnaires were administered to subjects who are 18years old and above. At this age the respondents are intellectually mature to answer questions. The questionnaireswere brief and short to avoid respondents tiring on the way. The pilot study to test the research instrument was done on different subjects and not the ones on whom the actual research were to be conducted to prevent bias in the respondents.

3.7.2 External Validity

Basavanthappa (2007) defined external validity as the extent to which the findings of the research can be generalized to a larger population or to a different social, economic and political setting. To ensure external validity, the sample comprised of subjects from different economic, social, religious and cultural backgrounds. The study took place in different institutions across the country. In order to avoid novelty effects, the researchers took neutral and constant treatment of all respondents to avoid enthusiasm or skepticism which would have influenced the responses. The researchers did not give any non-verbal cues to subjects which would have influenced the responses.

3.8 RELIABILITY

Reliability is the degree of consistence and dependability with which an instrument measures an attribute (Polit and Beck, 2008). An instrument is considered to be reliable if it is able to reproduce the same results if repeated by a different researcher on the same or similar respondents. This can be on two different occasions.

In this study the researchers ensured reliability by standardizing the research instrument. The research tool was tested through a pilot study that was conducted in an environment similar to where the actual study was done, before conducting the main study.

Furthermore to ensure validity and reliability, the data collection tool was modified after the pilot study. Additions and subtractions to the questionnaire were done based on the findings from the pilot study.

3.9 . DATA COLLECTION TECHNIQUE

Data collection techniques allow information to be systematically collected on subjects involved in the study and the settings in which they are (Varkevisser, et al, 2007). Collection of data has to be systematic. If data collection is done haphazardly, it can be difficult to answer the research question in a conclusive way. Data was collected over a period of 20 days and about 2 to 3 interviews were conducted per day per person. The researchers got permission from authorities at the University of Zambia, School of Medicine, Department of Nursing Sciences. Authority was further sought from Livingstone General Hospital, Chikankata Mission Hospital, Kamoto Mission Hospital and Kitwe Central Hospital. The researchertook at least 30 to 35 minutes in administering one questionnaire.

This instrument was administered as follows:

- The researcher got permission from authority on the ward and the respondents.
- The researcher introduced themselves to the respondent.
- The researcher explained the purpose of the interview and reasons for undertaking the research.

- The researcher then asked for permission to interview the respondents as well as recorded responses during the interview.
- The researcher wrote or ticked responses in the spaces provided on the questionnaire.
- The researcher did not force the Participants to be interviewed- they willingly participated.
- The researcher assured the respondents of confidentiality.
- The researcher did not write the respondents' names on the interview schedule.
- Finally the researcher thanked the respondents at the end of each interview and reassured them of confidentiality again.
- The researcher went through the questionnaire for proof reading to check for consistence in the answers given and for completeness of the interview schedule.

The advantages of this Semi-structured interview schedule are:

1. Respondents describe a situation in their own understanding or words.
2. Any misunderstandings of questions can be corrected on the spot.
3. Questions are rephrased while retaining the same meaning.
4. There is a high response rate because of the presence of the researcher.
5. The researcher is able to observe body language during the interview.

The disadvantage of the semi structured interview schedule is that it is time consuming. Sometimes the respondent gets bored in the process even before exhausting cardinal questions on the questionnaire.

3.10.PILOT STUDY

Burns and Groove (2009) defines a pilot study as "a smaller version of a proposed study to refine the tools that will be used for data collection." A pilot study is done just like the actual proposed study using similar subjects, similar setting, similar treatment, and the same data collection and analysis techniques (Burns and Grove, 2009).

The researchers used findings from the pilot study to determine whether the proposed study was feasible and to identify problems with the research design. The pilot study also determined the

reliability and validity of the research instruments and gave the researchers experience with the respondents. A pilot study was conducted in the surgical wards at the University Teaching Hospital (U.T.H) in Lusaka District because the Hospital conducts a lot of elective surgeries. There are a lot of students in training and working at U.T.H. Furthermore, U.T.H is a tertiary hospital and the biggest teaching hospital in the country which receives referrals from the entire country. They handle a lot of patients who could have been counseled at various levels during the referral process from one level of care to another. These characteristics make it similar to the actual study settings chosen for this study. It consisted of 10respondents which represents 5% of the actual study sample population. The participants for the pilot study were selected using convenience sampling method. The respondents were interviewed using semi -structured interview schedule to test the data collection tool. Adjustments were made to the tool as necessary.

3.11. ETHICAL AND CULTURAL CONSIDERATIONS

The research conformed to moral, ethical and legal standards of scientific enquiry. It is a requirement that each research undertaking should be concerned with human welfare and be sensitive to the rights of research subjects. If any research is harmful to subjects, it violates the ethical code of nursing and is termed as being illegal (Basavanthappa, 2007). The respondents have the right to know the risks involved in participating in the research, the purpose of the research, the nature of the study situation and the results of the study. They also have the right to confidentiality and the right to participate or withdraw from the study.

In this study, ethical issues were addressed by requesting for permission to conduct the study from the hospital management at Livingstone General Hospital, Chikankata Mission Hospital, Kamoto Mission Hospital and Kitwe Central Hospital. Personal consent was sought from the clients who were willing to participate in the study. The respondents were briefed about the purpose of the study and were equally informed that they had the right to participate, refuse or withdraw from the study anytime. The respondents were assured of confidentiality of information shared with the researchers. They were told that their names would not appear on any questionnaire meaning that the information they gave was non-subjective and no victimisation would result as such. The information was generalized to the population that

wasrepresented by the study subjects. The information obtained was not publicised until after all data analysis was completed.

3.12 PLANS FOR DATA ANALYSIS

Data analysis is the phase of a study that includes classifying, coding and tabulating information needed to perform quantitative or qualitative analyses according to the research design and appropriate to the data (Mosby, 2009). It follows collection of information and precedes its interpretation or application. Politand Hungler (2007) defined data analysis as the process of categorizing, scrutinizing and cross-checking the research data and testing for research hypothesis using the data. Data analysis plan describes the strategies the researchers intend to use for data analysis.

After data was collected, the questionnaires were arranged according to serial numbers. Sorting out data was done immediately the questionnaires were collected to check for completeness and to ensure that mistakes were taken care of by the researcher. All responses against were categorized and coded before being entered on Statistical Package for Social Sciences (SPSS). The data was analyzed manually with the help of a scientific calculator and using SPSS. This helped the researchers to fully understand the data which they collected. Frequency tables, pie charts and bar chartswere used to present data and cross tabulations were prepared to show the relationships among variables.

3.13. PLANS FOR DESSEMINATION OF FINDINGS

After data analysis, a report was written to communicate the findings to the public. The most important reason for undertaking health systems research was to obtain results that could be used to improve health and health care, therefore the researchers intended to disseminate the results to the relevant stake holders. A copy was given to the Department of Nursing Sciences, the University of Zambia (UNZA) – Medical Library,M.o.Hand to all the Hospitals where the study was conducted. Researchers also retained a copy each. The researchersused clinical presentations, seminars and workshops to disseminate the research findings.

CHAPTER FOUR

4.0: DATA ANALYSIS AND PRESENTATION OF FINDINGS

This chapter presents results of the quantitative findings from the study. It also highlights the analysis and interpretation of data. The purpose of this study was to determine factors that influence patients consenting to major surgery at Livingstone General, Chikankata Mission, Kitwe Central and Kamoto mission Hospital. Data for the study was collected using a structured interview schedule where two hundred (200) respondents were interviewed. The findings of the study have been presented in frequency tables, pie charts and bar charts showing findings on demographic data, knowledge of informed consent, attitude as well as communication skills of health workers towards the patient`s understanding of obtaining consent.

4.1Data analysis

Data analysis is "the systematic organisation, providing the structure to and drawing out the meaning from research data. It involves synthesis of research data and testing of research hypothesis using data which was collected" (Polit and Beck, 2008).

Before the data collection exercise, a pilot study was conducted at the UTH, Lusaka to refine the data collection tool. Adjustments were made to the tool prior to data collection. After collecting data, questionnaires were also checked for completeness and validity. Then the data was entered for analysis using SPSS software. In some cases calculations were done manually. Frequency tables, bar charts and pie charts were generated from the findings to assist in analysis and understanding the findings.

4.2 Presentation of Findings

The study findings are presented according to demographic and study variables. This was to facilitate a better understanding of the study findings. The findings of this study have been presented using frequency tables, pie charts, bar charts and cross tabulations. Frequency tables, bar charts and pie charts are suitable because they summarise the findings in a meaningful manner for easy understanding. Cross tabulations help to analyse relationships between variables related to consenting for surgery. The findings of the study have been presented as stipulated below:

4.2.1 DEMOGRAPHIC DATA

Demographic data included age, sex, religion, education level, occupation and marital status of the respondents.

Table 2; SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE (n – 200)

VARIABLE	FREQUENCY	PERCENTAGES (%)
AGE		
18- 29	65	32.5
30 -39	67	33.5
40 -49	38	19.0
50 - 59	10	5.0
60 and above	20	10.0
Total	**200**	**100.0**
GENDER		
Male	52	26.0
Female	148	74.0
Total	**200**	**100.0**
RELIGION		
Pentecostal	28	14
Catholic	50	25
Protestant	118	59
Other	4	2
Total	**200**	**100**
LEVEL OF EDUCATION		
Primary	86	43.0
Secondary	54	27.0
College	44	22.0
University	7	3.5
Other	9	4.5
Total	**200**	**100.0**

OCCUPATION		
Employed	58	29.0
Self - employed	19	9.5
Unemployed	116	58.0
Other	7	3.5
Total	**200**	**100.0**
TIME ELAPSED SINCE OPERATION		
Less than one month ago	148	74.0
Less than two months ago	28	14.0
Less three months ago	24	12.0
Total	**200**	**100.0**
MARITAL STATUS		
Single	39	19.5
Married	140	70.0
Divorced	8	4.0
Widowed	10	5.0
On separation	3	1.5
Total	**200**	**100.0**

Majority of the respondents (33.5%) were aged between 30 and 39 years while the minority (5%) of the respondents were aged between 50 and 59 years. The mean age was 40 years. Females were more (74%) compared to males (26%).

More than half of the respondents were Protestants (59%) while the smallest percentage of 2% was recorded on other religious denominations. In the comparison of level of formal education, most (43%) of the respondents had attained primary education while those who went up to university were the lowest (3.5%).

Majority of the respondents were unemployed (58%). The rest of the respondents (42%) were either formally or self-employed.

Most(74%) of the respondents had a surgical operation conducted on them one month before the research was conducted. Few (12%) of the respondents were operated on more than two months before the research was conducted.

More respondents (70%) were married, 28.5% were not married and those on separation represented 1.5% of the respondents.

4.2.2 KNOWLEDGE OF INFORMED CONSENT

This section investigated data concerning knowledge that the respondents had on the informed consent.

Table 3: Heard of Informed Consent (n= 200)

Heard of Informed consent	Frequency	Percent
Yes	119	59.5
No	81	40.5
Total	**200**	**100.0**

Table three indicates that 59.5% of the respondents had heard about the informed consent while 40.5% had not heard of the informed consent.

Table 4: Definition of Informed Consent (n =119)

Definition of Informed Consent	Frequency	Percent
Correct	58	48.7
Incorrect	61	51.3
Total	**119**	**100.0**

Out of the 119 respondents who had heard of Informed Consent, 51.3% did not know what Informed Consent was.

Figure 1: Respondents knowledge of Legal Age for Consenting (n= 200)

Figure 5 shows that 76% of the respondents did not know the legal age for consenting to surgery. About 67% out-rightly did not make any attempt to mention the legal age for consenting, while 9% indicated a wrong age for consenting. Only 24% knew the legal age for consenting.

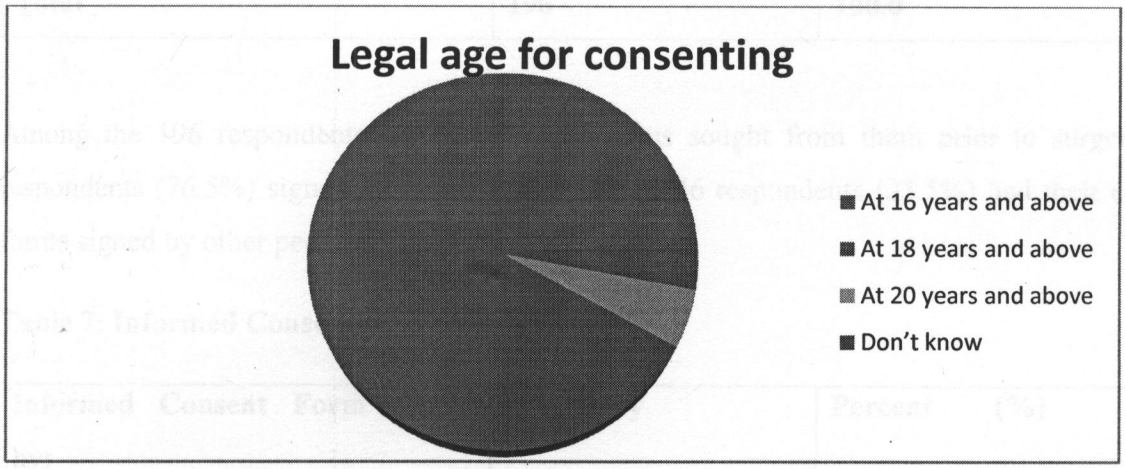


Table 5: Permission Obtained from Respondent Prior to Surgery (n =200)

Permission Obtained from Respondent.	Frequency	Percent
Yes	196	98.0
No	4	2.0
Total	**200**	**100.0**

Majority (98%) of the respondents actually gave permission to health workers for the operation to be done while a small percentage (2%) could not recall anyone seeking their authority for surgery to be done on them.

Table 6: Giving Informed Consent (n= 196)

Signed on Consent Form	Frequency	Percent (%)
Yes	150	76.5
No	46	23.5
Total	**196**	**100.0**

Among the 196 respondents whose permission was sought from them prior to surgery 150 respondents (76.5%) signed the consent form, while 46 respondents (23.5%) had their consent forms signed by other people.

Table 7: Informed Consent form Signed (n= 46)

Informed Consent Form signed by:	Frequency	Percent (%)
Parent/Guardian	25	54.3
Hospital medical superintendent	1	2.2
Other	20	43.5
Total	**46**	**100.0**

Out of the 46 respondents whose consent forms were not signed by the respondents themselves, 25 (54.3%) were signed by the guardians to the respondents, 1 (2.2%) were signed by the Hospital Medical Superintendent and 20 (43.5%) were signed by other people rather than the guardians and the Hospital Medical Superintendent.

Table 8: Knowledge of Surgical Procedure before Consenting (n = 200)

Knowledge of Surgical Procedure	Frequency	Percent
Yes	177	88.5
No	23	11.5
Total	**200**	**100.0**

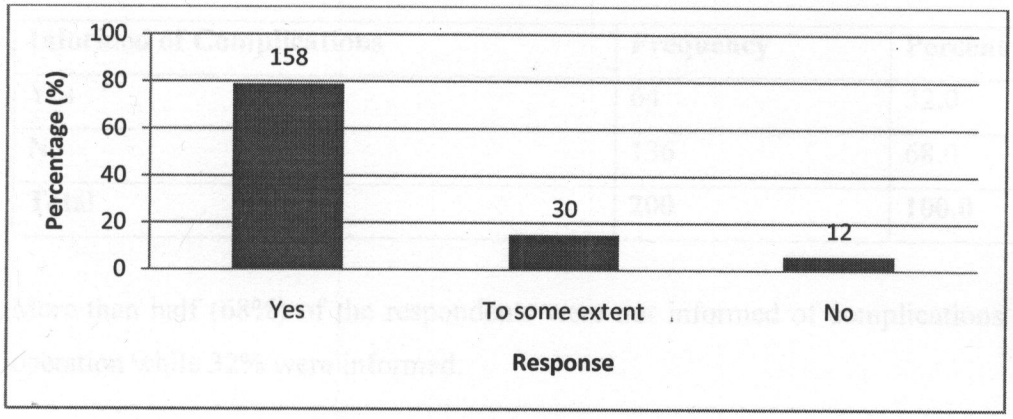
The majority of the respondents (88.5%) had prior knowledge about the surgical procedure to be performed on them before consenting whilst 23 (11.5%) were not aware about the procedure to be done on them before consenting.

Table 9: Definition of Surgical Procedure (n =177)

Definition of Surgical Procedure	Frequency	Percent
Knew the definition	171	96.6
Did not know the definition	6	3.4
Total	**177**	**100.0**

Out of the 177 respondents who indicated knowing the surgical procedure to be conducted on them before consenting, 171 (96.6%) were able to define the surgical procedure and only 6 (3.4%) were not able to define it.

Figure 2: Respondent Given Enough time to Make a Decision (n = 200)



More than half (79%) of the total respondents were comfortable with the time given to them to decide whether to accept or decline surgery. About 15% expressed dissatisfaction with time allocated for them to make informed decision, while 6% said time was not adequate.

Table 10: Surgical Operation done by Surgeon Who Explained to Patient (n = 200)

Surgical Operation done by Surgeon who explained the Procedure	**Frequency**	**Percent**
Yes	131	65.5
No	69	34.5
Total	**200**	**100.0**

The majority (65.5%) of the respondents had their operation done by the surgeon who explained the procedure to them, while 34.5% said the surgical operation was done by a different surgeon who was not involved in the initial explanation of the surgical operation.

Table 11: Respondent Informed of the Possible complications of surgery (n=200)

Informed of Complications	Frequency	Percent
Yes	64	32.0
No	136	68.0
Total	**200**	**100.0**

More than half (68%) of the respondents were not informed of complications of their surgical operation while 32% were informed.

Table 12: Respondents Recall Possible Complications of Surgical Operation (n =64)

Complications	Frequency	Percent
Correct	47	73.4
Incorrect	17	26.6
Total	**64**	**100.0**

Out of 64 respondents who were informed of the complications, 47 (73.4%) could remember the post-operative complications whereas 17 (26.6%) could not give correct complications.

4.2.3 ATTITUDE

This chapter investigated the attitude of health workers towards the patients who underwent surgery as a treatment option. These findings reflect the attitude of health workers in the pre-surgery and post-surgery period.

Table 13: Felt Welcome to Surgical Department (n=200)

Felt welcome	Frequency	Percent
Yes	198	99.0
No	2	1.0
Total	**200**	**100.0**

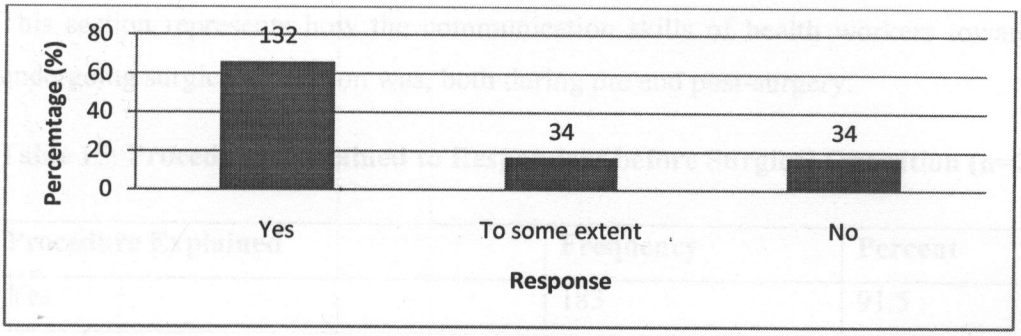
The majority of the respondents 99% (198) were of the opinion that they felt welcome to the Surgical Department while the minority 1% (2) did not feel welcome.

Table 14: Respondents' Involvement in Decision Making about Care (n=200)

Respondent's Involvement in Decision Making	Frequency	Percent
Yes	169	84.5
No	31	15.5
Total	**200**	**100.0**

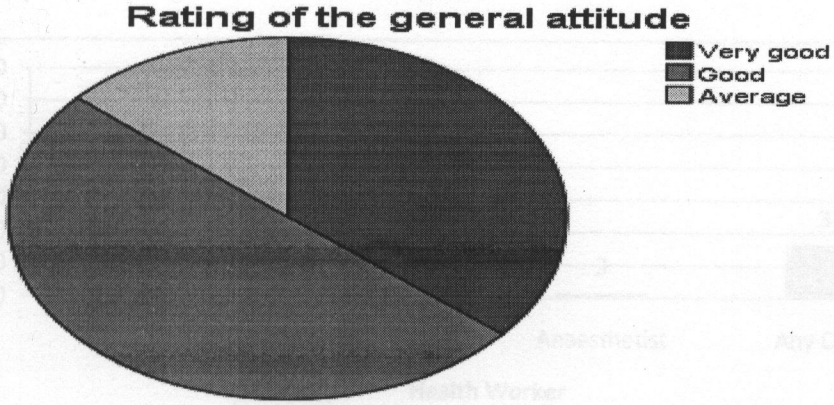
More than two thirds 84.5% (169) of the respondents were involved by the health care provider to make decisions about their care where as less than one third 15.5% (31) respondents were not involved.

Figure 3: Health Worker's Concern towards Patient's Questions and Worries (n=200)



More respondents (66%) felt that the health care providers who asked them to sign the consent form before surgery showed concern for their questions and worries. There was an equal representation in percentage (17%) between the respondents who expressed partial satisfaction of the concern by health workers over their questions and worries and those who indicated that there was no concern at all.

Figure 4: General Attitude of Health Workers (n=200)



Out of the 200 respondents who were interviewed, slightly more than half (50.5%) rated the health workers' general attitude to be good, 36% said the attitude was very good and 13.5% rated the attitude as average. None of the respondents rated the attitude to be bad among the health workers.

4.2.4 COMMUNICATION SKILLS

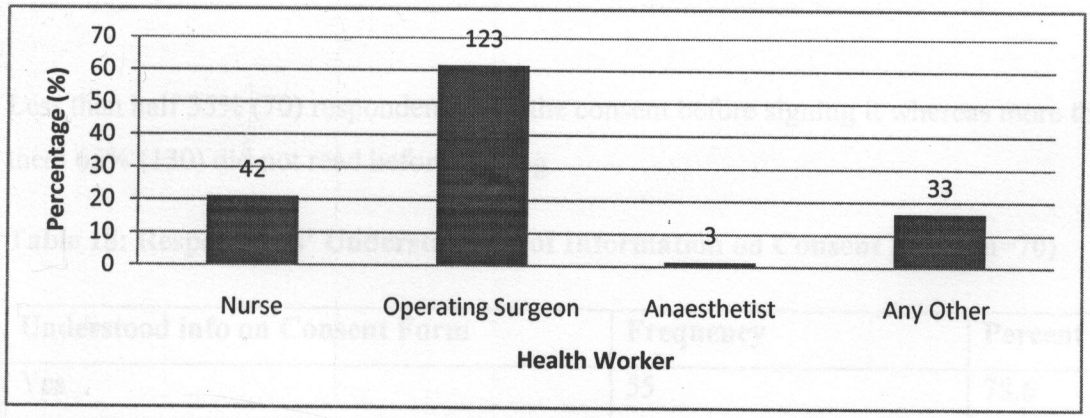
This section represents how the communication skills of health workers towards the patients undergoing surgical operation was, both during pre and post-surgery.

Table 15: Procedure Explained to Respondent before Surgical Operation (n=200)

Procedure Explained	Frequency	Percent
Yes	183	91.5
No	17	8.5
Total	**200**	**100.0**

The majority (91.5%) of the respondents who were interviewed said the procedure was explained to them before surgery meanwhile 8.5% (17) said no explanation was given to them by the health workers before surgery.

Figure 5: Health Worker Who Explained Surgical Procedure (n=200)



More than half (61.5%) of the respondents indicated that the operating surgeon explained the procedure to them while 38.5% of the respondents indicated that the procedure was explained to them by either the Nurse, the Anaesthetist or Other members of the health care team.

Table 16: Mood During Explanation of Procedure (n=200)

Mood of Health Worker	Frequency	Percent
Good	193	96.5
Bad	7	3.5
Total	**200**	**100.0**

Most of the respondents (95.5%) described the mood of the health workers as being good when explaining the surgical procedure to be performed on them, whilst the minority (3.5%) described it as bad.

Table 17: Read Details of Consent Form Prior to Surgery (n=200)

Read Consent	Frequency	Percent
Yes	70	35.0
No	130	65.0
Total	**200**	**100.0**

Less than half 35% (70) respondents read the consent before signing it whereas more than half of them 65% (130) did not read before signing.

Table 18: Respondents' Understanding of Information on Consent Form (n=70)

Understood info on Consent Form	Frequency	Percent
Yes	55	78.6
No	15	21.4
Total	**70**	**100.0**

Of the 70 respondents who read the consent form, 78.6% understood what they read on the consent form while 21.4% did not understand.

Table 19: Knowledge of Dangers and Risks with Surgery (n=196)

Knew Dangers and Risks	Frequency	Percent
Yes	101	51.5
No	95	48.5
Total	**196**	**100.0**

More than half of respondents (51.5%) who signed the consent knew the dangers and risks involved with surgery whereas less than half (49.5%) did not know the dangers and risks involved.

Table 20: Health Worker Spent Enough Time with Respondent during Information Giving (n=183)

Enough time with Health Worker	Frequency	Percent
Yes	155	84.7
No	28	15.3
Total	**183**	**100.0**

Majority of the respondents (84.7%) were given enough time by the health workers to understand the information on informed consent. On the other hand, 15.3% of the respondents were not given enough time to understand the information given to them on informed consent

Table 21: Respondent Given Time to Ask Questions (n=155)

Given Time to ask Questions	Frequency	Percent
Yes	95	61.3
No	60	38.7
Total	**155**	**100.0**

Out of the 155 respondents, 61.3 % agreed to have had a chance to ask and answer questions while 38.7% said the health worker did not give them time to ask or answer any questions.

Table 22: Respondents' Questions Answered Appropriately (n =95)

Appropriate answers	Frequency	Percent
Yes	84	88.4
No	11	11.6
Total	**95**	**100.0**

Table 19 indicates that 88.4% felt that their questions were answered appropriately, while some (11.6%) felt their questions were not answered to their satisfaction.

Table 23: Use of Clear Language by Health Workers (n=200)

Clear language	Frequency	Percent
Yes	195	97.5
No	5	2.5
Total	**200**	**100.0**

Of all the 200 respondents, a larger number (97.5%) said the language used by the health worker was clear and not strange, whilst the remaining 2.5% had difficulties understanding the language.

Table 24: Used Other Methods to Explain Condition (n=183)

Used Other Methods	Frequency	Percent
Yes	39	21.3
No	144	78.7
Total	**183**	**100.0**

Majority of the respondents (7875%) said the health worker did not use any other method such as pictures or drawings to explain the kind of surgery they would undergo. Only a few (21.3%) were explained to or taught using pictures/drawings

Table 25: Respect and Concern during Health Worker – Patient Interaction (n =200)

Rate of respect	Frequency	Percent
High	124	62.0
Average	76	38.0
Total	**200**	**100.0**

Table 25 indicates that 62% of the health workers were highly respectful of their clients, whilst 38% had average respect for the clients. No health worker was reported to have had no respect for the patients.

4.3. 0: RELATIONSHIP AMONG STUDY VARIABLES (CROSS TABULATIONS)

DEMOGRAPHIC DATA

Table 26: Relationship between Knowledge of Informed Consent and Age

		Knowledge of Informed Consent			Total	P Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
Age	18- 29	11 (45.8)	42 (30.2%)	12 (32.4%)	65 (32.5%)	
	30 -39	6 (25%)	47 (33.8%)	14 (37.8%)	67 (33.5%)	
	40 -49	5 (20.8%)	27 (19.4%)	6 (16.2%)	38 (19%)	
	50 - 59	1 (4.2%)	8 (5.8%)	1 (2.7%)	10 (5%)	
	60 and above	1 (4.2%)	15 (10.8%)	4 (10.8%)	20 (10%)	
Total		**24 (100%)**	**139 (100%)**	**37 (100%)**	**200 (100%)**	**0.859**

Table 26 above shows that the highest number of respondents who had adequate knowledge were those between the ages of 30-39 years (37.8%), while the lowest number of respondents (2.7%) with adequate knowledge were between 50-59 years old. Most of the respondents with moderate knowledge were from the same age group as those who had adequate knowledge (30-39 years old), representing 33.8%. Majority (45.8%) of the respondents with inadequate knowledge, were aged 18-29 years and the smallest representation among them were aged 50 years or more. However, there was no significant statistical relationship between knowledge and age of the respondents when a chi –square test was applied ($p > 0.05$). The study failed to reject the null hypothesis that there is no relationship between the respondents' level of knowledge on informed consent and their age.

Table 27: Relationship between Knowledge of Informed Consent and Gender

		Knowledge of Informed Consent			Total	P-Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
Sex	Male	12(50%)	30(21.6%)	10(27%)	52(26%)	
	Female	12(50%)	109(78.4%)	27(73%)	148(74%)	
Total		**24(100%)**	**139(100%)**	**37(100%)**	**200(100%)**	**0,013**

Most (78.4%) of the respondents who had moderate knowledge were females, while a few were males (21.6%). There was a significant statistical relationship between the respondents' knowledge on informed consent and gender, which was evidenced by a P-value of 0.013 (P - value < 0.05) .Therefore the study rejected the null hypothesis that there is no relationship between the respondents' knowledge of informed consent and gender.

Table 28: Relationship between Knowledge of Informed Consent and Level of Education

		Knowledge of Informed Consent			Total	P-Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
Highest Level of Education	Primary	11(45.8%)	70 (50.4%)	5 (13.5%)	86 (43%)	
	Secondary	6 (25%)	39 (28.1%)	9 (24.3%)	54 (27%)	
	College	4 (16.7%)	21 (15.1%)	19 (51.4%)	44 (22%)	
	University	1 (4.2%)	2 (1.4%)	4 (10.8%)	7 (3.5%)	
	Other	2 (8.3%)	7 (5%)	0(0%)	9 (4.5%)	
Total		**24 (100%)**	**139 (100%)**	**37(100%)**	**200(100%)**	**0.000**

Majority of the respondents who had adequate knowledge of informed consent went up to college (51.4%). The minority of the respondents who had adequate knowledge about informed consent went up to university (10.8%). Majority (50.4%) of the respondents who stopped schooling at primary level had moderate knowledge about informed consent and this same age group scored highest (45.8%) among respondents who had inadequate knowledge about informed consent. This was because respondents in this age group were more among the entire study population. The P-value in this comparison was 0.05 indicating that there was a significant

statistical relationship between respondents' knowledge of informed consent and their level of education. This comparison rejected the null hypothesis that there was no relationship between the respondent's knowledge on informed consent and their level of education. The higher the level of education, the more the knowledgeable a person would be about informed consent.

ATTITUDE

Table 29: Relationship between Knowledge of Informed Consent and General Attitude of Health Staff.

		Knowledge of Informed Consent			Total	P-Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
General Attitude of the Health Care Team	Very good	6 (25%)	53 (38.1%)	13 (35.1 %)	72 (36%)	
	Good	14 (58.3%)	71 (51.1%)	16 (43.2 %)	101(50.5%)	
	Average	4 (16.7%)	15 (10.8%)	8 (21.6 %)	27(13.5%)	
Total		**24 (100%)**	**139 (100%)**	**37 (100 %)**	**200(100%)**	**0.352**

Majority (38.1%) of respondents with moderate knowledge on informed consent said the general attitude of the health workers was very good, while 43.2% of those who had adequate knowledge about informed consent rated the general attitude of health workers to be good. Generally, most respondents in this study said that the attitude of the health workers was good. However, the study revealed that the respondents with inadequate knowledge were few (16. 7%) amongst those who said that the attitude of health workers was good. The P-value in this comparison was 0.352 indicating that there was no significant relationship between the level of knowledge of informed consent and the general attitude of the health workers. The study failed to reject the null hypothesis that there is no relationship between the respondents' level of knowledge about informed consent and the general attitude of health workers.

Table 30: Relationship between Knowledge of Informed Consent and Respect and Concern by the Surgeon during Interaction.

		Knowledge of Informed Consent			Total	P-Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
Rate of Respect and Concern by the Surgeon during your interaction	High	10(8.1%)	95(76.6%)	19(15.3%)	124(100%)	
	Average	14(18.4%)	44(57.8%)	18(23.6%)	76(100%)	
Total		**24(12%)**	**139(69.5%)**	**37(18.5%)**	**200(100%)**	**0.015**

About 15.3% of the respondents with adequate knowledge said that the health workers had high respect for patients, while 23.6% of the respondents from the same group said the rate of respect by health workers was average. More than half (76.6%) of the respondents with moderate knowledge said the respect of health workers towards patients was high. There was a significant statistical relationship between the respondents' knowledge of the informed consent and the rate of respect and concern by the surgeon during the surgeon-patient interaction evidenced by a P-Value of 0.015. Therefore the study rejected the null hypothesis that there is no relationship between the level of knowledge of consent and respect with concern by surgeon.

COMMUNICATION

Table 31: Relationship between knowledge of Informed Consent and Time to Ask and Answer Questions.

		Knowledge of Informed Consent			Total	P-Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
Enough Time to Ask and Answer Questions.	Yes	12 (50%)	57 (41%)	26(70.3%)	95(47.5%)	
	No	12 (50%)	82 (59%)	11(29.7%)	105(52.5%)	
Total		**24 (100%)**	**139(100%)**	**37 (100%)**	**200(100%)**	**0.006**

Table 31 shows that majority of the respondents (52.5%) were not given enough time to ask and answer questions by the health workers while less than half (47.5%) of the respondents had enough time to ask and answer questions. About 70.3% of the respondents with adequate knowledge said they were given enough time to ask and answer questions, while 59% of the respondents with moderate knowledge said they were not given enough time to ask and answer questions concerning informed consent. The P-value in this relationship was 0.006, which shows that there was a significant statistical relationship between the respondents' level of knowledge about informed consent and the amount of time allocated to patients for asking questions and getting responses from the health workers.

Table 32: Relationship between Knowledge of Informed Consent and Language

		Knowledge of Informed Consent			Total	P- Value
		Inadequate knowledge	Moderate knowledge	Adequate knowledge		
Use of Appropriate Language	Yes	23 (95.8%)	135 (97.1%)	37 (100%)	195(97.5%)	
	No	1 (4.2%)	4 (2.9%)	0	5 (2.5%)	
Total		**24 (100%)**	**139 (100%)**	**37 (100%)**	**200(100%)**	**0.521**

Table 32 shows that 97.5% of the respondents said the health workers used a language which was clear to them during communication prior to surgery. All (100%) the respondents with

adequate knowledge said they had no problems or difficulties with the language. Statisticaly 97.1% respondents with moderate knowledge on informed consent and 95.8% with inadequate knowledge on informed consent had no difficulties in the language used by the health workers. Only 2.9% of the respondents with moderate knowledge about informed consent and 4.2% of those with inadequate knowledge on informed consent had difficulties in understanding the language used by the health workers during their interaction. This relationship gave a P-Value of 0.521 in which case the study failed to reject the null hypothesis that there was no relationship between the languages used to explain surgery to the patient.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 INTRODUCTION

The discussion of findings is based on a sample of 200 respondents who underwent major surgery from July to September, 2012 at Kamoto Mission Hospital in Mambwe, Chikankata Mission Hospital in Chikankata, Kitwe Central Hospital and Livingstone General Hospital. The data was collected within the period of five weeks from the 8th to the 26thof October, 2012. The respondents were either admitted to the mentioned hospitals or were coming for review in the outpatient department. The purpose of the study was to determine factors that influence patient's consenting to major surgery. The discussion of findings is centred on the following study variables; demographic data, patients knowledge of informed consent, attitude of health workers and communication skills of health workers.

5.1 DEMOGRAPHIC DATA

Section A of this questionnaire elicited information on the demographic characteristics of the respondents. The demographic characteristics of the respondents which were relevant to the study were age, gender, religion, level of education, occupation, time elapsed since operation and marital status.

In this study majority of the respondents (33.5%) were aged 30 to 39 years and the minority were those aged 50 to 59 years (5%). This could be attributed to the fact that between the ages of 30 to 39 years most of the people are in the child bearing age where most complications related to obstetrics and gynaecology are expected. Most people within this age group are involved in so much work and family activities exposing them to a lot of dangers like accidents and occupational hazards which would lead to conditions such as fractures and hernias. The treatment of these conditions is by performing surgical operations. The ages of 50 to 59 years are less active in general activities which may expose them to dangers of disease. Those in employment would have retired and resting peacefully at home.

Most (74%) of the respondents were females, while (26%) were males (Table 2). This could be attributed to the fact that females have a better health seeking behaviour than males. The other

fact could be that most of the admissions and reviews were due to obstetrics and gynaecological conditions than any other causes of major surgeries.

Majority (98%) of the respondents were Christians while the minority (2%) belonged to other religions (Table 2). Among the christians, majority (60.2%) were protestants, while minority were Pentecostals (14.3%). This could be attributed to the fact that Protestantism is a combination of several denominations unlike the catholics (25.5%) and Pentecostals which are independent religious organisations, hence protestantism may have a bigger representation of respondents in the communities where the study was conducted than any other religious organisations.

Most of the respondents (58%) were unemployed. This could be attributed to the fact that majority of respondents were females, many of whom could have been either house wives or single but unemployed as the trend of employment in Zambia favoured the male gender. This finding is related to the study that was conducted by Central Statistics Office (CSO, 2005) on female employment share in Zambia which stated that across industries women`s employment share made up minorities. The least of the respondents (3.5%) which were not categorised as employed, self- employed and unemployed, were representative of those who were still in school among the respondents.

Majority (74%) of the respondents had their operations done within one month at the time of the study, while minority (12%) had not yet clocked three months from the date of operation but were way above one month since their operations were done. This could be due to the fact that most of the respondents were still admitted to the hospitals at the time of study than those who came for follow up. The other reason could be that the more someone stays home after the operation the more they do not see the need of going for any follow up at the hospital, especially if they do not experience any complications.

Most (70%) of the respondents were married while the least (1.5%) of the respondents were on separation. This could be attributed to the fact that married people usually support and encourag each other to seek medical attention if they are faced with a health problem than the other categories. Separation is not a very commonly embraced custom in Zambia and so it is very rare. This could be the reason why minority of the respondents were on separation.

5.2.DISCUSSION OF EACH VARIABLE

5.2.1: KNOWLEDGE OF INFORMED CONSENT

Knowledge is one factor that is very important in the practice and the delivery of health care. In this research the knowledge variable was meant to measure how much respondents know about the informed consent. Several questions were asked to establish various basic knowledge that every client scheduled to undergo surgery is expected to have. The knowledge characteristics which were relevant to this study were as follows; whether the respondents have ever heard of informed consent, definition of informed consent, legal age for one to give informed consent and whether permission was obtained from respondents before the operation was done. Other relevant characteristics were; whether the respondents gave informed consent on their own or someone did, procedure done and its definition, enough time given to respondents to make an informed decision before undergoing surgery, whether the explanation of the procedure was done by the operating surgeon or somebody else and finally the type of surgical complications which were likely to occur during the peri-operative period.

The study revealed that more than half of the respondents (59.5%) had heard of informed consent before the surgical operation, while 40.5% had not heard about it (Table 3). Surprisingly, more than half (51.3%) of those who said they heard about informed consent could not define it. This indicates that 119 respondents (59.5%) had an idea about informed consent but they were not furnished with full details of what it was or entails. This study therefore shows that there is knowledge deficit of what informed consent entails among the clients or population accessing surgical care. (The concept of informed consent means that the patient should be well knowledgeable of the type of surgery so that they make a decision after being given enough information concerning the surgical operation in question).The implication is that if patients do not have enough knowledge on what a consent is, the situations surrounding the conditions for obtaining consent, it becomes very difficult for the health workers to obtain consent. Even if the patients have the capacity to exercise autonomy in informed consent, they may relent and wait for other family members or spouses to make a decision on their behalf. This could delay the surgical intervention as it would mean that everything has to wait until someone else comes to consent. But when appropriate information has been given, patients are able to consent consciously. The freedom of consenting shows how ready someone is to undergo the planned

surgical procedure, the readiness even makes it possible for the patients to have quick recovery because they are well prepared for the procedure.

With regard to knowledge on the legal age when one is allowed by law to consent to surgery, 76% of the respondents did not know the age at all (figure 1). Only 24% out of the 200 respondents were able to give the correct legal age for one to make an informed decision regarding surgery. This implies that most of the people who go for surgery give informed consent to undergo an operation without understanding whether they are eligible to sign on their own or not. In some way, this can be attributed to the poor reading culture in our society where people do not take time to read and know what is right for them. Health workers may sometimes not do enough to sensitise these people on who qualifies to give informed consent. At times patients are just told that they do not qualify but without specifications on why they do not qualify. Majority of the respondents (Table 2) had primary education (43%) and this could mean that most of the respondents were illiterate. They could not read the legal age which is even clearly stated on the consent forms on which they sign.The study shows that the level of literace is important to identification of the legal age for consenting to surgery. It implies that if the legal age is not considered rightly, there can be a legal implication especially to the health care worker in the event that the un expected outcome surfaces for example, a patient dies in the process of the operation or develops a serious complication of a permanent deformity. This study is similar with the findings of the study by Suzukawa (2011) court, where a Doctor was sued by the parents of the minor patient for not consulting them for a consent before the operation, after the minor developed a fatal complication.

Most of the respondents (98%) gave permission for the health care providers to conduct the surgical operation. Out of these, the guardians, parents and other authorised people gave permission or obtained consent on behalf of 23.5% of the study population. It was impressive to find that 88.5% of the respondents knew the kind of operation even before going for the surgical operation. This in a way shows that there is effort from the health workers to educate the patients about their conditions and type of suggested surgical options. Though majority of the respondents knew the surgical procedure to be performed on them before consenting, it's still worrying that some patients were asked to sign even when they did not know the procedure they were to undergo. This could be due to a number of reasons such as; respondents' inability to

fully comprehend the information given to them because they may have been old or illiterate. This has an effect on the patient in that it will affect the recovery. A patient who does not know the type of operation that has been conducted on him may fail to accept his situation postoperatively and may be uncooperative to his own care which can lead to slow recovery. A study by Travelline (2005) in the USA revealed that among patients who gave informed consent, 44% did not know the exact nature of the problem.

Considering the time given to patients to make an infomed decision before surgery, most of the respondents (79%) agreed that the time they were given was enough. This might be so because the study focused on patients who had undergone elective surgery. A smaller percentage (21%) said the time they were given was not enough. This indicates that most of the respondents were given enough time to make an informed decision prior to surgery. This implies that giving patients enough time helps them to understand more about the surgical procedure to be undertaken and this can influence making informed decisions.

Majority of the explanations (65.5%) were done by the surgeon who performed the operation. In short, surgeons were doing their level best to educate the patients before obtaining informed consent. In some few cases (34.5%), other members of the health care team explained the procedure. Studies have shown that when the operating surgeon does the explanation of type of surgery to be undertaken, the patients develop trust and confidence towards the health care team. Some of the explanations were done by the nurses and anaesthetists instead of the operating surgeon. Few of the explanations were done by junior doctors who did not go with the patients to the operating theatre. This study showed that some surgeons do have time to explain the patient's condition and treatment options, while some surgeons do not have that time to sit down with their patients. Ideally the surgeon who performs the operation is the one who is expected to take the leading role in explaining the condition. Patients would have less worry even as they go to theatre for the operation because they are already acquainted to the surgeon who is dealing with their case.

There is a lot of information that surgeons explain to the patients. Information on peri-operative complications is one of them. In this study, very few (32%) respondents were aware of complications, out of the (32%) the majority could remember some of the complications. The majority of the respondents (68%) did not know any complications. This indicated that little

information was shared in the interest of making patients aware of the possible complications following surgery. This could mean that there is a deficit in the amount of information delivered to patients in the preparatory phase prior to major surgery. Making patients aware of the possible complications protects the health care team from law pursuits or legal implications as depicted in the study by Suzukawa (2011) California where the doctor was sued by the father to the Minor who underwent surgery without proper procedures of obtaining consent. In this case the surgeon was found wanting because he obtained consent through the phone without making the father to the patient understand the implications of the consent. When patients are aware of complications, they will decide either to accept or reject surgery with full knowledge of the implications of their choice. The client can not sue the health workers if they know what is involved in their surgical operation.

5.2.2: ATTITUDE OF HEALTH PROVIDERS TOWARDS PATIENTS

This variable assessed the attitude of the health care providers towards patients who underwent major surgery. In this study, attitude of health care providers referred to general feeling or perception or relationship between the people rendering a health service and the patients who were undergoing surgery or the clients. The respondents were asked questions to assess the attitude of the health care providers. These questions included the following; whether the respondents were welcomed by the health care providers when they went to the health care facility, respondents' involvement in decision making about their care, concern about the patients' questions and worries by health care providers and how the health care providers' general attitude was rated by the respondents.

When respondents were asked whether they were welcomed by the health care providers at the hospital when they went to the surgical department, the majority (99%) of the respondents were of the opinion that they were welcomed in a positive manner, while only (1%) of the total number of respondents had a feeling that they were not being welcomed. This implies that the reception of the health care providers towards the patients was good. The better the reception someone receives the higher the probability of a positive attitude by the recipient. The positive attitude among clients facilitates quick recovery after surgery and creates room for a therapuetic relationship between the health worker and the client.

Regarding decision making about patients' care, 84.5% of the respondents agreed that they were involved in decision making while 15.5% of the respondents indicated that they were not involved. This indicated that despite the general attitude of the health care providers being good, a small percentage still have problems involving clients in their own care, which depicts poor attitude. Poor attitude by health workers negatively affects patients comprehension of information in conseting to major surgery. This implies that even the compliance and healing may be delayed because patients are psychologically not relaxed.

More than half of the respondents (66%) felt that the health care providers who asked them to sign the consent showed concern for their questions and worries before surgery, while less than half of the respondents (34%)expressed no confidence for the consideration of their worries and concerns by health care providers. This implies that most concerns of the respondents were addressed and questions were appropriately answered signifying that the respondents had the freedom to make a choice without any coercion for consenting to surgical procedures.

On general attitude of the health care providers 86.5% of the respondents rated the general attitude to be good while (13.5%) rated the attitude as average. Generally this gives an understanding that the general attitude of the health providers was good as observed by the patients. The implications of this finding on attitude is that the respondents were very free to ask questions of their concerns because the atmosphere provided by the health care workers was conducive and promoted autonomy of decision to consent. But it may also suggest that the respondents may have been answering this questionnaire with the fear of not wanting to disappoint the health care providers with their answers. In this case the implication would be significant of respondent bias and this may lead to the fact that no effort would be tailored to correct the wrong attitude because of the wrong picture this may give.

5.2.3: COMMUNICATION SKILLS

Communication skills are an important part of delivering information to the respondents. The communication skills in this study focused on the ability of the health care staff to effectively transfer information on informed consent to patients.

This study revealed that the mood of most of the health workers seemed to be good while explaining the procedure to the respondents. A few respondents however described the mood as being bad (Table 14). This could be attributed to respondent bias as they try to give wrong information on purpose due to fear that they might be victimised. If respondents do not open up to express themselves, it will be difficult to put measures to improve the communication skills while explaining the procedure to patients. These findings are similar to a study by Goldworth (2009) in U.S.A. that health care givers need some special communication skills in order for the clients to understand what is being communicated to them with less problems. The mood of the health care providers play an important role in the way patients receive information.

Majority (65%) of the respondents (Table 15) did not read the details of the consent form on their own before surgery. These findings are similar to the study which was conducted by Kalala (2011) in South Africa on patients perceptions and understanding of informed consent for surgical procedures, which indicated that the majority of the respondents did not read the consent form. Few respondents (35%) read the details of the consent form on their own before signing it. The fact that majority of the respondents did not read the consent form on their own before consenting to major surgery could be attributed to the low level of education among some respondents (43%). For some respondents, health workers had to read the information on the consent form for them and they expressed satisfaction with the explanations thereof. Among the respondents who read the consent form, 78.6% understood what they read from the consent form against 21.4% who said they did not understand. These findings indicate that the poor reading culture in our society is hampering patients' attitude towards reading of the consent form. Most patients were satisfied with their passivity (listening) during interaction with the health workers and they deemed the self-reading of the consent form as insignificant. The lack of understanding can be solved through the introduction of informed consent forms which have been translated into local languages. In a study by Kalala (2011), it was established that two thirds (2/3) of the respondents needed further explanation of the information on the consent form in their mother tongue for them to understand. From Kalala's study, it was clear that most of the respondents could have signed the informed consent form without understanding because only 27% percieved the signing of the consent form as proof that they understood the surgical procedure and the associated implications.

In this study, researchers wanted to establish how much time health workers allocate to preparation of patients before obtaining informed consent prior to major surgery. The study indicates (Table 18) that 3/4 (77.5%) of the respondents had adequate time to discuss informed consent with health workers. Since this study involved patients who underwent elective surgery, it would have been a big source of worry to learn that health care providers failed to have enough time for discussion of informed consent with patients undergoing planned major surgery. The few (22.5%) who did not have enough time with the health care providers are still a source of worry because they also went for major elective surgery and it is expected that by that time they should have been exposed to enough information concerning informed consent during major surgery. A study to determine how much time nurses have for patients by Westbrook (2011) indicated that the time nurses spend with patients is associated with improved patients' outcomes, reduced errors, and patient-nurse satisfaction. The study was aimed at establishing how nurses distribute their time across daily or routine tasks. In a study period of two (2) years, Westbrook demonstrated that nurses only dedicated less than half (37%) of their time to patients. The rest of the time is spent alone and partly with colleagues. This demonstrates the cause – effect relationship between time spent in explaining a surgical procedure and the patients' understanding of informed consent.

Some patients related factors such as clients' attitude and level of education as part of the determinants to one's degree of understanding of informed consent. As it is said, `when the students are ready to learn, the teacher appears and delivers the information.` Sometimes the teacher appears when the students are not ready to learn meaning much as the health care workers or providers could wish to spend more time to give information to the patients, the patients should be willing to learn and should have a positive attitude for them to comprehend the information being delivered to them or else the effort to educate them would be meaningless. This is critical when it comes to promoting the autonomy for making an informed decision to consenting to major surgery.

It was surprising that despite many (77.5%) respondents agreeing that they had enough time with the health workers, more than half of those who said they had enough time with the health workers (52.5%) were not given chance to ask questions (Table 19). Asking questions helps someone understand the information about informed consent and major surgery clearly. The

health workers take time also to clear myths and misconceptions from the patients. This necessitates the creation or establishment of a therapeutic relationship which is cardinal as suggested by Peplau (1952) in her interpersonal relationship theory. She (Peplau) wrote that the client has needs which the health care provider (example nurse) wants to meet through some interpersonal and therapeutic process. The health worker assumes the role of a resource person, counselor, teacher, surrogate and an active leader. In order to function in these capacities, the patient should be given time to ask questions and be answered appropriately and satisfactorily.

Among the few (47.5%) who were given time to ask questions, 88.4% were satisfied with the answers and explanations regarding dangers and risks involved with surgery in relation to consenting to major surgical interventions which they got from the health care providers. The failure to understand or lack of satisfaction on explanations can not be attributed to misunderstanding in terms of language because 97.5% of the respondents said the language which was used by the health workers was clear (Table 20). Medical language/terms can be difficult for a lay man to understand so it is always advised that simple language be used, and where possible other teaching aids could be used to promote the patient's understanding. In this study, most explanations (80.5%) were done without any illustrations or pictures. Only a few (19.5%) were taught with the help of pictures and drawings indicating where the incision will be made and how they will look like after surgery, for instance after amputation. People learn differently, some are visual learners, while others are tactile or auditory learners. When the above mentioned methods are used together, generally the assimilation is higher than using one independent method. The use of various teaching aids and methods to explain an operation to a patient can add to the patient's understanding of surgery. This implies that communication is key to dessemination of information in any situation. There are different types of communication, using a combination of the types makes communication more effective and easy to desseminate than a single type at a time. This is important especially when explaining about surgery and consenting to surgical operations, the use of drawings, the models and actual patients who underwent the similar surgical procedure and they are healed, in addition, precipitates a better understanding which can help the patient to make an informed consent to major surgery.

This study also established the patients' view of the rate of respect and concern by the surgeons and other members of the health care team during communication. It was found that most patients (62%) appreciated the respect and concern they received from the surgeons and other members of the health care team during communication (Table 22). The study further indicates that (38%) of health care workers had average respect to the patients during communication. Generally, the respondents in this study felt that the health care providers respected the patients and were concerned throughout the communication process.

The findings in this study imply that health care workers exibited good communication skills during the pre-operation preparation and most patients were happy with the way the health care team was communicating with them. The challenge was the poor utilisation of other communication methods for example drawings and models to precipitate better understanding to the patients during communication. The respondents who had enough time with the health care workers and even had time to ask questions demonstrated better understanding of their conditions.

The factors that influence consenting to major surgery could be many but they are all dependent on the information that a patient would be able to receive from the Health care workers during communication of the surgical procedure to be undertaken. In this view good communication skills make it easier for the patients to understand the given information and be able to consent to surgery with less difficulties.

5.3: IMPLICATIONS TO THE HEALTH SYSTEMS

5.3.0 Introduction

The implications of the findings of the study on factors influencing consenting to major surgery have been discussed under four items which are related to the topic. The main headings include Nursing practice, Nursing research, Nursing administration and Nursing education. The study revealed that the adequate knowledge on informed consent was 18.5% of the total number of the respondents. This implies that there was a big number of the respondents who had compromised knowledge of the informed consent ranging from moderate 69.5% to inadequate knowledge

12%. This is the reason why the discussion in the implications will skew to the above identified headings. There could be many reasons to this which will be discussed below.

5.3.1 Implications to Nursing Practice

In Zambia the majority of the health workers in the health care system are nurses. The nurses play an important role in providing counselling, health education, guidance to patients and advocate for the health of the patients. Hence in view of these roles it is important to consider serious inclusion of the counselling of the patients who are supposed to undergo surgery at the health institution. There is need in practice to formulate check lists which should go with every patient's chart to ascertain that all necessary information has been given and patient has been involved in making decisions or else surgery may not yield its purpose of healing or curing disease.

The study revealed that the general attitude of health workers was good although a small percentage disputed that statement. There is need for nurses to continue with what they have been taught in nursing education as they practice. For example, getting permission from patient before they carry out any procedure.

5.3.2 Nursing Research

Little research has been done on informed consent in the field of surgery. In other words informed consent is receiving less attention in nursing research. Informed consent is such an important topic that ignoring it can lead to serious legal implications. Since not much research has been done on informed consent, Nurse Researchers should investigate or conduct research on informed consent to help in sensitising other nurses on the importance of informed consent as well as the importance of educating the patients to know their rights. At every level of health care service delivery, there are challenging issues which require careful investigations for lasting solutions to be sourced. Research is one method of discovering more about phenomena which requires investigations. It helps to improve the healthcare delivery systems service and promotes formulation of good health policies which has an influence on the trends of nursing.

5.3.3 Nursing Administration

The study has shown that the majority (65%) of respondents did not read the consent form before signing. This shows that the nursing staff is not putting much effort to encourage patients to read the consent form before signing. Even among those who read the consent form, 21.4% of them did not understand what they read. This has an implication on the nursing administration in that it suggests that nursing administration should be intensified to ensure that nurses are performing to the stipulated standards.

However, it is not only the nursing profession that is responsible for ensuring that patients/clients have been given enough information about their conditions, but it also requires other members of the health care team especially those participating closely to surgery such as surgeons to explain everything about the procedure the patient has to undergo before a consent is obtained.

Nursing administration is very important to coordinate the activities of the entire health care team to promote collaboration. This is because the nursing profession is at the centre of the health care team and the patients at large.

5.3.4 Nursing Education

According to this study, several implications can be depicted to nursing education. Generally the issue of surgery and the informed consent is key to effective communication between the health care team and the patients, hence there is need to highly consider the pre-service and in-service training programmes. When this matter receives appropriate attention, it will help to maintain professionalism and prevent misunderstandings between health care workers and patients thereby reducing legal implications as much as possible.

5.4 RECOMENDATIONS

Based on the findings, the following recommendations have been made;

MINISTRY OF HEALTH

(i) The Ministry of Health should incorporate issues of the implications of lack of informed consent to surgery in many on-going workshops to improve awareness of this need to the health workers.

(ii) The process of obtaining consent should be included as a component in performance assessments which is done by the Ministry of Health.

(iii) Ministry of Health should increase the number of health workers in the hospitals so that more time can be dedicated to each patient for explaining the importance of informed consent and its implications to both the patient and the health workers.

(iv) The Ministry of health should promote and encourage more researches and documentation of any legal issues arising from improper handling of the process of consenting to surgery in the health facilities in Zambia.

TRAINING SCHOOLS OF NURSING

(i) The schools of nursing should re-emphasise the teaching of the importance of informed consent in the curriculum to mitigate legal implications in the health sector. These include the following;

- Respect for autonomy of individual patient`s rights.
- The importance of giving information before intervention of any surgical procedure.
- The need to get permission from the patient prior to any procedure.

(ii) The schools of nursing should advocate to have more appropriately trained clinical instructors to match with the increased number of students enrolment to balance up the student - clinical teacher ratio so that students are adequately mentored in obtaining informed consent as that is what they will practice when they graduate as nurses.

(iii) The management of the Nursing training institutions should promote mutual collaboration with the Nursing service area as the students depend much on the ward nursing staff who are present in the ward at all times to help them learn more on consenting to procedures.

KITWE CENTRAL HOSPITAL, LIVINGSTONE GENERAL HOSPITAL, KAMOTO MISSION HOSPITAL AND CHIKANKATA MISSION HOSPITAL

(i) The more staff a hospital has, the more time will be dedicated to Information, Education and Communication (IEC) with patients, including explanation and obtaining informed consent. Therefore management of the hospitals mentioned above should lobby for more staff through the Provincial Health Offices to help meet the high demand for health services.

(ii) The management of these institutions should support health workers to continue practising what they have learnt during training and to uphold their professionalism.

(iii) The management of these hospitals should put up strict guidelines of the processes to be followed before a surgical procedure is conducted on clients. These guidelines should include a checklist to ensure that all the stipulated pre-requisites are followed and emphasise on obtaining informed consent from all clients scheduled for surgery.

(iv) The management through the In service department should organise symposiums and in service workshops on the awareness of the importance of the process of obtaining consent in relation to its legal implication.

(v) The management in these institutions should constitute committees which should look into the matter of translating the consent form into the local languages appropriate to the locality for easy understanding for the clients during signing and explanation.

5.5 DISSEMINATION OF FINDINGS

This research on factors influencing patients consenting to major surgery was conducted in order to obtain results that can be used to help improve health care and health service delivery. The findings of this study need to be implemented if any improvement is to be achieved in obtaining informed consent in the delivery of health services. Therefore the results from this research will

be disseminated to the relevant stake holders. A copy will be given to the Department of Nursing Sciences, University of Zambia Medical library, Ministry of Health, Kamoto Mission Hospital in Mambwe, Chikankata Mission Hospital, Kitwe Central Hospital and Livingstone General Hospitals. The findings will also be disseminated through clinical presentations, symposiums and workshops.

5.6 LIMITATIONS OF THE STUDY

(i) Convenient sampling used to select respondents could have affected generalisation of the findings because this is a non-probability sampling method where respondents are picked because they are available at the time of data collection and not by chance. Convenient sampling may be unrepresentative of the study population and some characteristics of the subjects may be over or under selected. This study had more of female respondents than males because these are the ones who were readily available.

(ii) The study was conducted by the researcher alone due to limitations in funds to train research assistants.

(iii) No research has been conducted on informed consent in Zambia. This made it difficult to make comparisons with other local researches and to determine the differences or similarities in findings.

5.7 CONCLUSION

The study was conducted to determine factors that influence patients' consenting to major surgery. A sample of 200 respondents was conveniently selected from Chikankata Mission Hospital, Kamoto Mission Hospital, Kitwe Central Hospital and Livingstone General Hospital on patients who had undergone elective major surgery.

The findings in this study indicated that formal education was key to patients' understanding of informed consent because the more educated some respondents were, the more knowledgeable they were on informed consent. The study findings revealed that more female respondents (73%) had adequate knowledge of informed consent than males (27%), so there is need to improve male involvement in health care utilisation. There is need to incorporate the education part of informed consent when giving any health related information to patients. There is also need to improve the health worker-patient ratio by employing more health workers. The study also

revealed that the majority of respondents were not given time to ask and answer questions and among those who were given enough time, most of them had adequate knowledge of informed consent. There is therefore need to give time to the patients to ask questions about their conditions more especially to those who have inadequate knowledge. This can be achieved through improving health worker patient ratio by employing more health workers. In response to the respect and concern given by the health workers to the patients, the study showed that the patients who had adequate knowledge were given more respect and concern than those who had inadequate knowledge of informed consent. Health workers need to treat patients equally despite their level of knowledge.

The researchers hope that these findings will be used to improve the clients' knowledge of informed consent on clients, and the attitude and communication skills of the health workers towards the patients.

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ANNEX I: STRUCTURED QUESTIONNAIRE

THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF NURSING SCIENCES

STUDY TITLE: FACTORS INFLUENCING PATIENTS CONSENTING TO MAJOR SURGERY

STRUCTURED INTERVIEW SCHEDULE FOR PATIENTS WHO HAVE UNDERGONE MAJOR SURGERY AT THE NAMED HOSPITAL (BELOW)

DATE OF INTERVIEW: .....OCTOBER, 2012

HOSPITAL: .....WARD: .....

QUESTIONNAIRE NUMBER ☐

INSTRUCTIONS TO THE INTERVIEWER:

1. Introduce yourself to the respondent.
2. Explain the purpose of the interview and reasons for undertaking the research.
3. Ask for permission to interview the respondents as well as taking notes.
4. Participants should not be forced to be interviewed.
5. Assure the respondent of confidentiality.
6. Do not write the respondent's name on the interview schedule.
7. Write or tick responses in the spaces provided.
8. Thank the respondent at the end of each interview and reassure them of confidentiality.

OFFICIAL U

SECTION A: DEMOGRAPHIC DATA

1. How old are you? (Age at your last birthday) _____Years

2. What is your sex?
   a) Male
   b) Female

3. What is your Religious Denomination?
   a) Pentecostal
   b) Catholic
   c) Protestant
   d) Others (specify) .....

4. What is your highest level of education?
   a) Primary
   b) Secondary
   c) College
   d) University
   e) Other (specify) .....

5. What is your occupation?
   a) Employed
   b) Self -employed
   c) Unemployed
   d) Other (Specify) .....

6. When were you operated on?
   a) Less than one month ago
   b) Less than two months ago
   c) Less than three months ago

7. What is your marital status?
   a) Single
   b) Married
   c) Divorced
   d) Widowed
   e) On Separation
   f) Cohabiting

SECTION B: KNOWLEDGE

8. Have you ever heard of informed consent?
   a) Yes
   b) No

9. If your answer to question 8 was yes, what is it?

   .....

   .....

10. At what age is an individual allowed by law to give consent?
    a) At 16 years and above
    b) At 18 years and above
    c) At 20 years and above
    d) Don't know

11. Did they obtain the consent or permission from you?
    a) Yes
    b) No.

12. Did you sign the consent form or give permission on your own?
    a) Yes
    b) No

13. If you did not sign on your own, who signed the consent form on your behalf?
    a) Parent / Guardian
    b) Hospital Medical superintendent
    c) Not applicable
    d) Other (Specify) .....

14. Did you know the surgical procedure that was to be performed on you before consenting?
    a) Yes
    b) No

15. If the answer to question 14 is yes what was the procedure?
.....
.....

16. Do you think you were given enough time to make your own decision about going for the operation?
    a) Yes
    b) To some extent
    c) No

17. Was the operation done by the surgeon who explained the procedure to you?
    a. Yes
    b. No

18. Were you informed of any complications associated with the procedure before signing consent?
    a. Yes
    b. No

19. What complication can you remember from what you were told?
.....

SECTION C: ATTITUDE OF HEALTH WORKERS

OFFICIAL USE

20. Did you feel welcomed when you came to this surgical department?

a. Yes
b. No

21. Did the health care provider involve you in making decisions about your Care?

a. Yes
b. No

22. Did the health care provider who asked you to sign the consent form show concern for your questions and worries before surgery?

a) Yes
b) To some extent
c) No

23. How would you rate the general attitude of nurses and other members of the health care team?

a) Very good
b) Good
c) Average
d) Bad
e) Very bad

SECTION D: COMMUNICATION SKILLS

24. Did someone explain the procedure to you before the operation was done?

a) Yes
b) No

OFFICIAL USE

25. Who explained the surgical procedure to you?
    a) Nurse
    b) Operating surgeon
    c) Anaesthetist
    d) Any other (Specify).....

26. What was their mood at the time he/she was explaining the procedure to you?
    a) Good
    b) Bad

27. Did you read the consent form and notes regarding informed consent?
    a) Yes
    b) No

28. Did you understand what you read from the consent form?
    a) Yes
    b) No
    c) Not applicable

29. Did you know the dangers and risks involved with surgery before signing the consent form?
    a) Yes
    b) No

30. Did the health worker spend enough time with you in order for you to understand the information he/she was giving you?
    a) Yes
    b) No

OFFICIAL USE

31. Did he give you time to ask and answer some questions?
    a) Yes
    b) No

32. Do you feel your questions were answered appropriately?
    a) Yes
    b) No
    c) Not applicable

33. Did he use a language which was clear to you?
    a) Yes
    b) No

34. Did the health care provider use any other method like pictures to explain the condition?
    a) Yes
    b) No

35. How would you rate the respect and concern by the surgeon during your interaction?
    a) High
    b) Average
    c) Low

THANK YOU FOR PARTICIPATING IN THIS RESEARCH STUDY

APPENDIX II; CONSENT FORM

Dear participant,

My name is ..... I am a student from the University of Zambia, Department of Nursing Sciences. I am pursuing a Bachelor of Science Degree in Nursing. In partial fulfillment of the degree programme, I am required to undertake a research project. My topic of study is "Factors influencing consenting to major surgery" at .....

You have been selected to participate in this study and I wish to inform you that participation in this study is voluntary. You are free to withdraw at any stage of the study if you wish to do so. I will ask you some questions about consenting to surgery or giving permission for an operation to be done on you. The information you will give me will be kept confidential and no name will be reflected on the questionnaire.

You will not receive any direct benefits from this study or monetary gain but the information that you will provide will help this hospital and relevant authorities in finding ways to implement the correct ways of obtaining informed consent or permission before surgery. This will in turn assist patients to understand surgery done on them and reduce the stress associated with surgical treatment. Ultimately, the outcome of your surgery is likely to improve.

I ..... of .....
on this ..... day of October, 2012 declare that I understand the purpose of this study and am willing to participate.

.....
Signature / Thumb print of respondent

.....
Signature of interviewer

APPENDIX III: LETTERS OF PERMISION

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.

3rd September, 2012.

The Medical Superitendent
Livingstone General Hospital,
P.O Box 60091,
Lusaka

u.f.s: The Head of Department,
School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A STUDY AT LIVINGSTONE GENERAL HOSPITAL

I am a 5th year undergraduate student from the University of Zambia, Department of Nursing Sciences, School of Medicine. In partial fulfillment of the Bachelor of Science in Nursing degree programme, I am required to conduct a research study. My research study topic is **"Factors Influencing Consenting to Major Surgery at Livingstone General Hospital."**

The study will be conducted on patients who have undergone major elective surgery in the past three (3) months, aged 18 years or more, and are either still admitted or discharged but coming for follow-up visits.

I write to request for permission to conduct the study at your institution. The study will be undertaken between 8th and 26th October, 2012.

Thanking you for your continued support.

Yours faithfully,

FundiwaBackson – 10058630 (RN)

Bsc. V Nursing Student

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.

3rdSeptember, 2012.

The Medical Superitendent
Kitwe CentralHospital,
P.O Box 20969,
Kitwe

u.f.s: The Head of Department,
School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A STUDY AT KITWE CENTRAL HOSPITAL

I am a 5th year undergraduate student from the University of Zambia, Department of Nursing Sciences, School of Medicine. In partial fulfillment of the Bachelor of Science in Nursing degree programme, I am required to conduct a research study. My research study topic is **"Factors Influencing Consenting to Major Surgery at Kitwe Central Hospital."**

The study will be conducted on patients who have undergone major elective surgery in the past three (3) months, aged 18 years and above, and are either still admitted or discharged but coming for follow-up visits.

I write to request for permission to conduct the study at your institution. The study will be

undertaken between 8th and 26th October, 2012.

Thanking you for your continued support.

Yours faithfully,

Milambo

Milambo Ethel -10009574 (RN/ RM)

Bsc. V Nursing Student

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.

3rdSeptember, 2012.

The Medical Officer-in-Charge
Kamoto MissionHospital,
P/Bag 14,
Mambwe.

u.f.s: The Head of Department,
School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A STUDY AT KAMOTO MISSION HOSPITAL

I am a 5th year undergraduate student from the University of Zambia, Department of Nursing Sciences, School of Medicine. In partial fulfillment of the Bachelor of Science in Nursing degree programme, I am required to conduct a research study. My research study topic is **"Factors Influencing Consenting to Major Surgery at Kamoto Mission Hospital."**

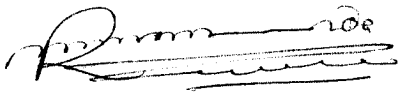
The study will be conducted on patients who have undergone major elective surgery in the past three (3) months, aged 18 years and above, and are either still admitted or discharged but coming for follow-up visits.

I write to request for permission to conduct the study at your institution. The study will be

undertaken between 8th and 26th October, 2012.

Thanking you for your continued support.

Yours faithfully,



Kwenda Robert -10061363 (RN/ OTN)

Bsc. V Nursing Student

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.

3rdSeptember, 2012.

The Medical Superitendent
Chikankata MissionHospital,
P/ BagS2,
Mazabuka

u.f.s: The Head of Department,
School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A STUDY AT CHIKANKATAMISSION HOSPITAL

I am a 5th year undergraduate student from the University of Zambia, Department of Nursing Sciences, School of Medicine. In partial fulfillment of the Bachelor of Science in Nursing degree programme, I am required to conduct a research study. My research study topic is **"Factors Influencing Consenting to Major surgery at Chikankata Mission Hospital."**

The study will be conducted on patients who have undergone major elective surgery in the past three (3) months, aged 18 years and above, and are either still admitted or discharged but coming for follow-up visits.

I write to request for permission to conduct the study at your institution. The study will be undertaken between 8th and 26th October, 2012.

Thanking you for your continued support.

Yours faithfully,

mSiazeele

SiazeeleMuloongo -10073892 (RN)

Bsc. V Nursing Student

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.
28th September, 2012.

The Medical Superintendent,
The University Teaching Hospital,
LUSAKA.

u.f.s: The Head of Department,
School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A PILOT STUDY AT U.T.H

We are 5th year undergraduate students from the University of Zambia, Department of Nursing Sciences, School of Medicine. In partial fulfillment of the Bachelor of Science in Nursing degree programme, we are required to undertake a research study. The title of our study is **"Factors Influencing Consenting to Major Surgery".** This study will target patients who have undergone elective major surgery in the past three (3) months in surgical wards and those coming for follow-up care. The respondents will be aged 18 years and above.

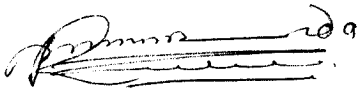
We are hereby requesting for permission to conduct a pilot study at your institution in the general surgical wards. The actual study will be conducted from Livingstone General, Kitwe Central, Kamoto Mission and Chikankata Mission Hospitals. The Pilot study is scheduled to be conducted between 3rd and 5th October, 2012 to test our data collection tools.

The members of the group are;

1. FundiwaBackson - 10058630
2. Kwenda Robert - 10061363
3. Milambo Ethel - 10009574
4. SiazeeleMuloongo - 10073892

Thanking you for your continued support.

Yours faithfully



Kwenda Robert (RN/OTN)

Bsc. V Nursing Student

All correspondence should be addressed
To the Executive Director
Telephone: 03 – 320221
Fax: 03 – 321365

In reply please quote:

No: .....

REPUBLIC OF ZAMBIA

MINISTRY OF HEALTH

LIVINGSTONE GENERAL HOSPITAL
P.O BOX 60091
LIVINGSTONE

11th October 2012

Mr. Backson Fundiwa
University of Zambia
School of Medicine
P.O Box 50110
LUSAKA

RE: PERMISSION TO UNDERTAKE A RESEARCH STUDY

Reference is made to your letter dated 3rd September 2012 in which you requested for permission to do a research on "Factors influencing consenting to major surgery at Livingstone General Hospital".

We are pleased to inform you that you can conduct your research. However, we would like to mention that your research findings and report should be purely for academic purposes.

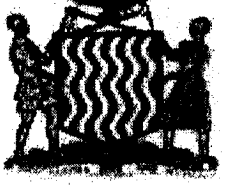
In this vein therefore, nothing regarding your research report or finding should be disseminated or released for public consumption.

Furthermore, you will be required to avail the management of Livingstone General Hospital with a copy of your final report or/and findings.

As a requirement for you to conduct this study, kindly respond stating your compliance to the conditions set forth in this letter.

Dr. H. N. Monze
MEDICAL SUPERINTENDENT
LIVINGSTONE GENERAL HOSPITAL

Cc. File



REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
KITWE CENTRAL HOSPITAL

Kuomboka Drive
P O Box 20969
Kitwe
Zambia

Telefax: 224365/228604
EM-kchmb@zamtel.zm

All Correspondence to Be Addressed to the Senior Medical Superintendent

Our Ref: MH/KCH/53/2/1
Your Ref:

9th October, 2012

Ms Ethel Milambo
University of Zambia
School of Medicine
Department of Nursing Service
P.O BOX 50110
LUSAKA

Dear Ms Milambo,

RE: APPLICATION TO UNDERTAKE A STUDY AT KITWE CENTRAL HOSPITAL- YOURSELF

Reference is made to your application dated 3rd September, 2012 regarding the above subject.

I am pleased to inform you that authority has been granted to conduct a research on "**Factors Influencing Consenting to Major Surgery at Kitwe Central Hospital".**

Kindly note that this research is purely for academic purposes and a copy of the report should be submitted to Kitwe Central Hospital Management for record purposes.

We wish you success in your studies.

Yours sincerely
KITWE CENTRAL HOSPITAL

OCT 2012

Phales P. Shantima (Mrs.)
A/Senior Human Resource Management Officer
For/SENIOR MEDICAL SUPERINTENDENT

2012

HCC
- No objection
- Can be introduced to
1+9D - Surgery

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
MEDICAL SUPERINTENDENT
2 OCT 2012
CHIPATA GENERAL HOSPITAL
P.O. BOX 510119,
CHIPATA

3rd September, 2012.

The Medical Superintendant
~~The Medical Officer in Charge~~
~~Kamoto MissionHospital,~~ CHIPATA GENERAL HOSPITAL
~~P/Bag 14,~~ Box 510119
~~Mambwe.~~ CHIPATA

u.f.s: The Head,
School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A STUDY AT KAMOTO MISSION HOSPITAL

I am a 5th year undergraduate student from the University of Zambia, Department of Nursing Sciences, School of Medicine. In partial fulfillment of the Bachelor of Science in Nursing degree programme, I am required to conduct a research study. My research study topic is **"Factors influencing consenting to major surgery at ~~Kamoto Mission Hospital.~~** CHIPATA GENERAL HOSPITAL"

The study will be conducted on patients who have undergone major elective surgery in the past three (3) months, aged 18 years and above, and are either still admitted or discharged but coming for follow-up visits.

I write to request for permission to conduct the study at your institution. The study will be undertaken between 8th and 26th October, 2012.

Thanking you for your continued support.

Yours faithfully,

Kwenda Robert -10061363 (RN/ OTN)
Bsc. V Nursing Student

The University of Zambia,
School of Medicine,
P.O Box 50110,
LUSAKA.

28th September, 2012.

The Medical Superintendent,
The University Teaching Hospital,
LUSAKA.

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School of Medicine, Department of Nursing Sciences,
P.O Box 50110,
LUSAKA.

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4. Siazeele Muloongo - 10073892

Thanking you for your continued support.

Yours faithfully

Kwenda Robert (RN/OTN)
Bsc. V Nursing Student

NDIX IV: RESEARCH WORK PLAN

	TASK TO BE PERFORMED	DATE	PERSON RESPONSIBLE	DAYS PER PERSON
	Literature review	Continuous	Researchers and research supervisor	252
	Development and finalizing of research proposal	1st June to September 7th , 2012	Researchers and research supervisor	99
	Development of Data collection tool	August 20th to September 7th, 2012	Researcher and researcher supervisor	19
	Clearance from the school	10th to 28th September, 2012	Researchers and supervisor	18
	Pilot study	1st to 5th October, 2012	Researcher	5
	Amendments to study tool	8th to 12th October, 2012	Researchers and Supervisor	5
	Data collection	8th October to 2nd November, 2012	Researchers	25
	Data analysis	5th November 2012 to 4th January, 2013	Researchers and Statistician	60
	Report writing	18th December 2012 to 31st January, 2013	Researchers and Supervisor	44

Draft report	4th to 28th February, 2013	Researchers and Supervisor	24
Final report	4th to 15th March, 2013	Researchers and Supervisor	11
Monitoring and evaluation	1st June 2012 to 15th March, 2013	Researchers and Supervisor	287
Dissemination of results	11th to 22nd March 2013	Researchers	11

NDIX V: RESEARCH BUDGET

	BLOCK AREA	ACTIVITY/ITEM	QUANTITY	UNIT COST (ZMK)	TOTAL COST (ZMK)
	STATIONARY	Ream of paper	5	30,000.00	150,000.00
		Pens (box)	1	50,000.00	50,000.00
		Pencils	10	500.00	5,000.00
		Rubber	4	1,000.00	4,000.00
		Ruler	4	1,000.00	4,000.00
		Stapular	4	20,000.00	80,000.00
		Tipex	2	10,000.00	20,000.00
		staples (box)	1	10,000.00	10,000.00
		Folders	4	2,000.00	8,000.00
		Box files	4	15,000.00	60,000.00
		Scientific calculators	4	60,000.00	240,000.00
TOTAL					631,000.00
	PERSONNEL	LUNCH ALLOWANCE			
		Researcher (for 35 days by 4)	140	50,000.00	7,000,000.00
		TRANSPORT			-
		Researcher (for 35 days by 4)	140	12,000.00	1,680,000.00
		Statistician (for 2 days by 4)	8	100,000.00	800,000.00
TOTAL					9,480,000.00
	SECRETARIAL SERVICES	Flash disk	4	70,000.00	280,000.00
		Bag for stationary	4	30,000.00	120,000.00
		questionnaire photocopying	215	1,400.00	301,000.00
		Report writing (130 pages)	130	4,000.00	520,000.00
		Report photocopying	130	200.00	26,000.00
		Proposal binding	1	40,000.00	40,000.00
		Report binding	10	70,000.00	700,000.00
TOTAL					1,987,000.00
AL					12,098,000.00
NTIGENCY (10%)					1,209,800.00
AND TOTAL					13,307,800.00

APPENDIX VI: BUDGET JUSTIFICATION

1. STATIONARY

Stationary was required for typing the research proposal, writing the final research report, photocopying and binding of the report. 215 interview schedules of 7 pages each were produced.

The rubbers, rulers, note books were needed for taking notes and drafts of the schedules as well as any tables this report drew. The scientific calculator was used to calculate the numerical figures during data analysis. Staples were used for putting papers together and to maintain a good arrangement. Tipex was used for correcting mistakes and the bags for carrying the documents and files whilst administering the interview by the researcher. The box files were used for putting in un used questionnaires while the folders were used to carry the used questionnaires.

2. SECRETARIAL SERVICES

There was need for funds to cater for the typing, photocopying and binding services. The flash disks were required for the storage of information electronically which was usedto send the work to the supervisor for corrections during the period of the research proposal as well as the report. This helped in the smooth running of all the programs in the process of producing the proposal and research report.

3. PERSONNEL

Personnel emoluments in forms of allowances and transport were of help to the researchers to be able to manage to do everything in time during the deliberation of conducting the research. The transport costsassisted the researcher to move from place to place to interview and conduct the activity. The movements were made possible to beat time so that everything could be done within the calculated time. The researchers and the supervisors needed allowances for lunch to enable them to eat during lunch as the activity was running for the whole day. During data analysis a statistician was involved to give a technical guide in analysing the information collected. However the total amount for all the budgeted activities on this budget wason the higher side because the budget covered four researchers.

APPENDIX VII:GANTT CHART OF ACTIVITIES AND THE TIME REQUIRED FOR EACH FROM JUNE 2012 TO MARCH 2013

MONTHS		JUNE				JULY				AUG				SEPT				OCT				NOV				DEC				JAN				FEB				MAR				APR			
No. of weeks per month		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Task to be performed	**Person responsible**																																											
Literature review	Researchers																																											
Development of proposal	Researchers																																											
Development of data collection tool	Researchers																																											
Clearance from school	Researchers																																											
Pilot study	Researchers																																											
Amendments to the study tool	Researchers																																											
Data collection	Researchers																																											
Data analysis	Researchers																																											
Report writing	Researchers																																											
Submission of draft research report to DNS	Researchers																																											
Submission of final report	Researchers																																											
Monitoring and evaluation of research project	Researchers																																											
Dissemination of findings																																												